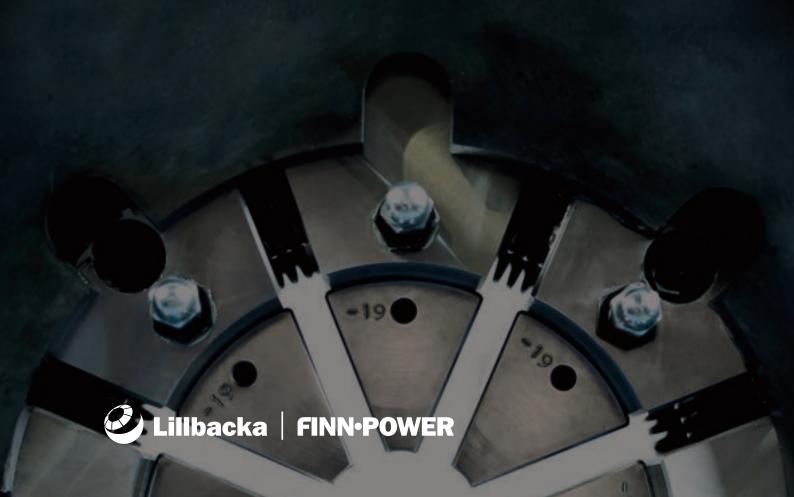


# PRODUCT CATALOGUE

VERSION 1.0 | 2024





### **PRODUCT CATEGORIES**





























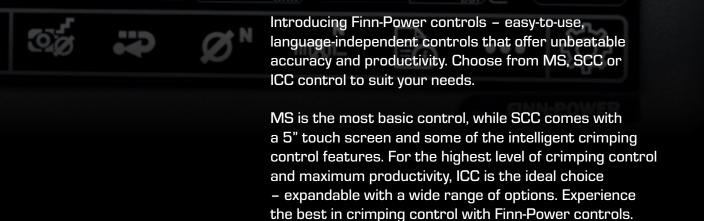








### **CONTROLS**



Ø 31.0

### **CONTROL COMPARISON**





FEATURE	MS	SCC	ICC
CRIMPING BY DIAMETER	YES	YES	YES
FOOT PEDAL (Double foot pedal also for CS- and P-models)	YES	YES	YES
BACK STOP (Back stop also for CS-models)	NO	YES	YES
RECIPIES	NO	YES	YES
COUNTERS	NO	YES	YES
CORRECTION	NO	YES	YES
OPENING	NO	YES	YES
DELAY	NO	YES	YES
GREASING ALARM	NO	YES	YES
AUTOMATIC GREASING	NO	NO	YES
PRESSURE CRIMPING	NO	NO	YES
STEP CRIMPING	NO	YES	YES
QUALITY CONTROL (ICC3)	NO	NO	YES
GRAPHICAL QUAL. MONITORING (ICC4)	NO	NO	YES
SCC DATA RECORDING	NO	YES	NO



# MS WELL-KNOWN FOR ITS EASE OF USE

MS-CONTROL SUITES FOR SINGLE-PIECE PRODUCTION (E.G. REPAIR SHOPS). THE MS-CONTROL IS THE MOST BASIC AND EASY TO USE CONTROL OFFERED BY FINN-POWER.

### STANDARD FEATURE

Crimping by diameter

### MS IS AVAILABLE FOR THESE MACHINES

P20CS, P20ZCS, P32CS, P32ZCS, P20X, P20NMS, P32X, P32NMS, P51, P60

More models may be added, please check the latest availability









### SCC

# SMART AND FAST CRIMPING CONTROL

SCC IS EASY-TO-USE BASIC CONTROL WITH 5" SCREEN, INCLUDING SOME OF THE INTELLIGENT ICC-CONTROL FEATURES.

- Simple, easy and fast
- Economical
- Intelligent functions
- Accurate
- Enables also P-machine connectivity to internet (reporting, recipe & job feeding etc)
- Correction value and crimping delay
- Counter (ascending/descending)
- Recipe memory for often used crimping programs
- Job queue
- Communication- and interface-options (USB, ETH)
- Data recording, control values (CSV)
- Step crimping





# ICC INTELLIGENT CRIMPING CONTROL

The only control in the world specifically designed for crimping machines. This ensures the best accuracy and repeatability in the market. New innovative automatic correction function removes the need for machine calibration.

ICC is very robust and high resistant for physical impact and vibration. IP66 compatibility quarantees operations in high humidity and extreme temperatures.

7" resistant touch screen and icon based graphical user interface enables fast and easy usage.

ICC comes with more advanced Recipe and Job Queue management. Favourites and color coded recipes make usage easy.

ICC enables individual user management with different level user rights.

ICC control is Industry 4.0 compatible.







### **SERVICE**

Service category crimping machines are designed for field repair use. Hand pump, air pump, 12/24V battery operated and 1ph/3ph electric models are available in this category.

For better weight balancing in service vans and on-machine repairs separate crimping head models also available. Keep your mobile service available for 24/7!



### SERVICE COMPARISON

TECHNICAL DATA	Р16НР	P16AP	P20HP	P20AP
Max crimping dia (mm/inch) 1)	45/1.77	45/1.77	61/2.40	61/2.40
Max crimping dia with master dies (mm/inch)	49/1.9	49/1.9	94/3.7	94/3.7
Max crimping force (kN)	955	955	1370	1370
Max crimping force (tonnage)	95	95	137	137
Hydraulic hose size (inch)	1 *	1 *	1 ½ *	1 ½ *
Industrial hose size (inch)	1.77 *	1.77 *	2.40 *	2.40 *
Die set series	16	16	20	20
Max opening (mm) 2)	+20	+20	+25	+25
Max opening without dies (mm)	59	59	109	109
Master die D/L (mm)	39/64	39/64	84/80	84/80
Master die D/L (inch)	1.54/2.52	1.54/2.52	3.31/3.15	3.31/3.15
Motor Power	Hand pump	Air pressure	Hand pump	Air pressure
DIMENSIONS (LxWxH)				
(mm)	331x401x271	331x346x271	487x441x389	583x477x345
(inch)	13.1x15.8x10.7	13.1x13.6x15.4	19.2x17.4x15.4	22.9x18.8x13.6
WEIGHT (KG/LBS)				
	26/57	28/62	66/146	59/130





TECHNICAL DATA	P20CS	P2OCS SCC	P32CS	P32CS SCC	P20X	P32X
Max crimping dia (mm/inch) 1)	61/2.40	61/2.40	87/3.42	87/3.42	61/2.40	87/3.42
Max crimping dia with master dies (mm/inch)	94/3.7	94/3.7	109/4.3	109/4.3	94/3.7	109/4.3
Max. crimping force (kN)	1370	1370	2000	2000	1370	2000
Max. crimping force (tonnage)	137	137	200	200	137	200
Cycle time 10 mm (s) 2)	13.9	13.9	21.1	21.1	7.0/13.9	8.7/21.1
Hydraulic hose size (inch)	1 ½ *	1 ½ *	2 *	2 *	1 ½ *	2 *
Industrial hose size (inch)	2.40 *	2.40 *	3.42 *	3.42 *	2.40 *	3.42 *
Die set series	20	20	32	32	20	32
Max. opening (mm)	+25	+25	+33	+33	+25	+33
Max. opening without dies (mm)	109	109	132	132	109	132
Master die D/L (mm)	84/80	84/80	99/80	99/80	84/80	99/80
Master die D/L (inch)	3.31/3.15	3.31/3.15	3.90/3.15	3.90/3.15	3.31/3.15	3.90/3.15
Motor Power (kW) 3)	1.6/2.2	1.6/2.2	1.6/2.2	1.6/2.2	2.2/3.0	2.2/3.0
Motor Power (HP) 3)	2.1/3.0	2.1/3.0	2.1/3.0	2.1/3.0	1.5/2.0	1.5/2.0
Oil tank volume	51	51	51	51	71	71
DIMENSIONS (LxWxH)						
(mm)	583x533x387	592x515x558	626x543x421	601x457x558	525x515x564	632x521x567
(inch)	22.9x21.0x15.2	23.3x20.3x22.0	24.7x21.4x16.6	23.7x18.0x22.0	20.7x20.3x22.3	24.9x20.6.x22.4
WEIGHT (KG/LBS)						
	68/183	81/178	125/257	130/287	100/243	155/331

DIMENSIONS (LxWxH)	P16HPZ	P16APZ	P20ZCS	P32ZCS
Crimping head (mm)	197x228x333	197x228x333	356x390x330	356x509x405
Crimping head (inch)	7.7x8.9x13.1	7.7x8.9x13.1	14x15.3x13	14x20x15.9
Hydraulic unit (mm)	121x406x145	139x394x148	249x457x326	249x457x326
Hydraulic unit (inch)	4.7x5.9x5.7	5.5x15.5x5.8	9.8x18x12.8	9.8x18x12.8
Weight (kg/lbs)	26/57.2	26/57.2	68/183	125/257
Hose length (metres)	4	4	4	4

### \* ACCORDING TO THE FITTING.

With standard dies. Crimping range can be increased with special dies.

Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.







### P16AP

### PORTABILITY FOR SERVICE

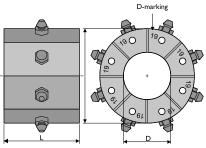
Finn-Power P16AP is air pump operated hydraulic crimping machine for repair workshops and field use. Easy to use, light and compact in size, allowing to be carried to any location.

Available also with hand pump (HP-model) and separate head/power pack configuration (Z-model).

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	45/1.77
Max crimping dia with master dies (mm/inch)	49/1.9
Max crimping force (kN)	955
Max crimping force (tonnage)	95
Hydraulic hose size (inch)	1 *
Industrial hose size (inch)	1.77 *
Die set series	16
Max opening (mm) 2)	+20
Max opening without dies (mm)	59
Master die D/L (mm)	39/64
Master die D/L (inch)	1.54/2.52
Motor Power	Air pressure
DIMENSIONS (LxWxH)	
(mm)	331x346x271
(inch)	13.1x13.6x15.4
WEIGHT (KG/LBS)	
28/62	
* ACCORDING TO THE FIT	TING.

### **DIMENSIONS P16APZ (LxWxH)**

Crimping nead (mm)	197X228X333
Crimping head (inch)	7.7x8.9x13.1
Hydraulic unit (mm)	139x394x148
Hydraulic unit (inch)	5.5x15.5x5.8
Weight (kg/lbs)	26/57.2
Hose length (metres)	4



- 1) With standard dies. Crimping range can be
- Ministandard dies. Crimping range can be increased with special dies. Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

ABSOLUTE QUALITY MADE IN FINLAND

CONTROL
Manual
MODELS
Z-model
Z-model

DIE SET 1	6-SERII	<b>S</b>	
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18212/10	10	55	10.0-12.0
18212/12	12	55	12.0-14.0
18212/14	14	55	14.0-16.0
18212/16	16	55	16.0-19.0
18212/19	19	55	19.0-23.0
18212/23	23	55	23.0-27.0
18212/27	27	65	27.0-31.0
18212/31	31	65	31.0-38.0
			,

In addition to the standard die sets, a wide range of special die sets is available on request.





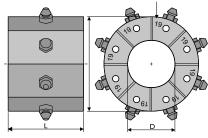
### PORTABILITY FOR SERVICE

Finn-Power P16HP is hand pump operated hydraulic crimping machine for repair workshops and field use. Easy to use, light and compact in size, allowing to be carried to any location. This hand-operated portable machine works even in places where electricity or compressed air are not available.

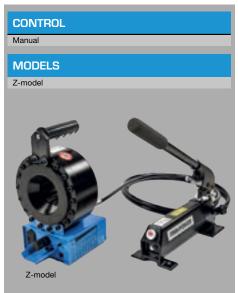
Available also with air pressure (AP-model) and separate head/power pack configuration (Z-model).

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	45/1.77
Max crimping dia with master dies (mm/inch)	49/1.9
Max crimping force (kN)	955
Max crimping force (tonnage)	95
Hydraulic hose size (inch)	1 *
Industrial hose size (inch)	1.77 *
Die set series	16
Max opening (mm) 2)	+20
Max opening without dies (mm)	59
Master die D/L (mm)	39/64
Master die D/L (inch)	1.54/2.52
Motor Power	Hand pump
DIMENSIONS (LxWxH)	
(mm)	331x401x271
(inch)	13.1x15.8x10.7
WEIGHT (KG/LBS)	
26/57	

DIMENSIONS P16	HPZ (LxWxH)
Crimping head (mm)	197x228x333
Crimping head (inch)	7.7x8.9x13.1
Hydraulic unit (mm)	121x406x145
Hydraulic unit (inch)	4.7x5.9x5.7
Weight (kg/lbs)	26/57.2
Hose length (metres)	4
	D-marking
	0. 0



- With standard dies. Crimping range can be increased with special dies.
   Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.



DIE SET 1	6-SERII	ES	
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18212/10	10	55	10.0-12.0
18212/12	12	55	12.0-14.0
18212/14	14	55	14.0-16.0
18212/16	16	55	16.0-19.0
18212/19	19	55	19.0-23.0
18212/23	23	55	23.0-27.0
18212/27	27	65	27.0-31.0
18212/31	31	65	31.0-38.0

In addition to the standard die sets, a wide range of special die sets is available on request.





### P20AP

### THE POWER IN SERVICE CRIMPING

Finn-Power P2OAP is a compact air pressure operated model for repair and maintenance needs. Ideal for workshops or field service use.

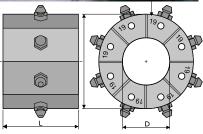
Easy crimping diameter adjustment and light indication for fast and reliable crimping results.

Please also see product cards for other power pack configurations. APL-model also available (MS-control device and indication light when crimping diameter reached).

ABSOLUTE QUALITY AADE IN FINLAND

TECHNICAL DATA	
Max. crimping dia (mm/inch) 1)	61/2.40
Max crimping dia with master dies (mm/inch)	94/3.7
Max. crimping force (kN)	1370
Max. crimping force (tonnage)	137
Hydraulic hose size (inch)	1 ½ *
Industrial hose size (inch)	2.40 *
Die set series	20
Max. opening (mm) 2)	+25
Max. opening without dies (mm)	109
Master die D/L (mm)	84/80
Master die D/L (inch)	3.31/3.15
Motor Power	Air pressure
DIMENSIONS (LxWxH)	
(mm)	583x477x345
(inch)	22.9x18.8x13.6
WEIGHT (KG/LBS)	
59/130	





- With standard dies. Crimping range can be increased with special dies. Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

### CONTROL

Manual

### **OPTIONS**

Tool rack with QuickChange-tool (part no 415663) QuickChange-tool (part no 691043) Mechanical back stop device (part no 705509)

### **DIE SET 20-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0

In addition to the standard die sets, a wide range





### P20HP

### POWER FOR SERVICE CRIMPING

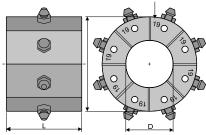
Finn-Power P20HP is hand pump operated hydraulic crimping machine for repair workshops and service van use. This hand-operated crimping machine works in places where electricity or compressed air are not available.

HPL-model also available (MS-control device and indication light when crimping diameter reached).

ABSOLUTF/
QUALITY/
MADE IN FINLAND
FINLAND
/

TECHNICAL DATA	
Max. crimping dia (mm/inch) 1)	61/2.40
Max crimping dia with master dies (mm/inch)	94/3.7
Max. crimping force (kN)	1370
Max. crimping force (tonnage)	137
Hydraulic hose size (inch)	1 ½ *
Industrial hose size (inch)	2.40 *
Die set series	20
Max. opening (mm) 2)	+25
Max. opening without dies (mm)	109
Master die D/L (mm)	84/80
Master die D/L (inch)	3.31/3.15
Motor Power	Hand pump
DIMENSIONS (LxWxH)	
(mm)	487x441x389
(inch)	19.2x17.4x15.4
WEIGHT (KG/LBS)	
66/146	





- With standard dies. Crimping range can be
- increased with special dies.

  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

CONTROL	
N.AI	

### **OPTIONS**

Tool rack with QuickChange-tool (part no 415663) QuickChange-tool (part no 691043) Mechanical back stop device (part no 705509)

DIE SET 20-SERIES
-------------------

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	5/	85	54.0-61.0

In addition to the standard die sets, a wide range



### P20CS

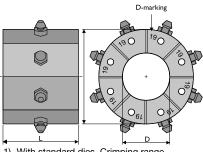
CS-models have been designed for service van use. Also available as Z-model with separate hydraulic unit for better weight balancing and space usage in service van. CS machines are battery powered with 12V or 24V crimping head on left as standard. Right version also available.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	61/2.40
Max crimping dia with master dies (mm/inch)	94/3.7
Max. crimping force (kN)	1370
Max. crimping force (tonnage)	137
Cycle time 10 mm (s) 2)	13.9
Hydraulic hose size (inch)	1 ½ *
Industrial hose size (inch)	2.40 *
Die set series	20
Max. opening (mm)	+25
Max. opening without dies (mm)	109
Master die D/L (mm)	84/80
Master die D/L (inch)	3.31/3.15
Motor Power (kW) 3)	1.6/2.2
Motor Power (HP) 3)	2.1/3.0
Oil tank volume	5 I
DIMENSIONS (LxWxH)	
(mm)	583x533x387
(inch)	22.9x21.0x15.2
WEIGHT (KG/LBS)	
68/183	

### **DIMENSIONS P20ZCS (LxWxH)**

Crimping head (mm)	356x390x330
Crimping head (inch)	14x15.3x13
Hydraulic unit (mm)	249x457x326
Hydraulic unit (inch)	9.8x18x12.8
Weight (kg/lbs)	68/183
Llaga lagath (mastras)	4





- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle. 12V / 24V. Overload controlled

# ABSOLUTE QUALITY

#### CONTROL

MS

#### **MODELS**

CS left, standard (12V or 24V) CS right (12V or 24V) Z-model

#### **OPTIONS**

Tool rack with QuickChange-tool (part no 415663) QuickChange-tool (part no 691043) Mechanical back stop device (part no 705509)



DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0
In addition to the standard die sets, a wide range of special die sets is available on request.			





CS-models have been designed for service van use. CS machines are battery powered with 12V or 24V crimping head on left as standard.

New Smart Crimping Control (SCC) brings smartness and connectivity for service and workshop machines. It is easy to use with features such as diameter crimping, recipes and data recording. A magnetic attachments makes it easy to change the place of control.



TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	61/2.40
Max crimping dia with master dies (mm/inch)	94/3.7
Max. crimping force (kN)	1370
Max. crimping force (tonnage)	137
Cycle time 10 mm (s) 2)	13.9
Hydraulic hose size (inch)	1 ½ *
Industrial hose size (inch)	2.40 *
Die set series	20
Max. opening (mm)	+25
Max. opening without dies (mm)	109
Master die D/L (mm)	84/80
Master die D/L (inch)	3.31/3.15
Motor Power (kW) 3)	1.6/2.2
Motor Power (HP) 3)	2.1/3.0
Oil tank volume	51
DIMENSIONS (LxWxH)	
(mm)	592x515x558
(inch)	23.3x20.3x22.0
WEIGHT (KG/LBS)	
81/178	



	D-marking
	19
6	
L	O <sub>61</sub> O <sub>6</sub>

- With standard dies. Crimping range can be increased with special dies.
   Theoretical with 10 mm cycle.
- 12V / 24V. Overload controlled

FINLAND	

CONTROL
SCC (5" touchscreen)

### MODELS

CS SCC left (12V or 24V)

#### **OPTIONS**

QuickChange-tool (part no 691043)

Mechanical back stop device (part no 705509) Electrical back stop device (part no 720197)

Foot pedal (part no 691563)

DIE SET 20-SERIES			
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0

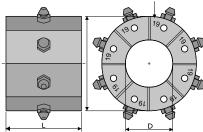
In addition to the standard die sets, a wide range of special die sets is available on request.



AFFORDABLE CRIMPER FOR SERVICE USE

Entry level crimping machine for occasional service use and small workshops. For more demanding crimping needs please see P20NMS.

TECHNICAL DATA			
Max crimping dia (mm/inch) 1)	61/2.40		
Max crimping dia with master dies (mm/inch)	94/3.7		
Max crimping force (kN)	1370		
Max crimping force (tonnage)	137		
Cycle time 10 mm (s) 2) 3)	7.0/13.9		
Hydraulic hose size (inch)	1 ½ *		
Industrial hose size (inch)	2.40 *		
Die set series	20		
Max opening (mm) 4)	+25		
Max opening without dies (mm)	109		
Master die D/L (mm)	84/80		
Master die D/L (inch)	3.31/3.15		
Motor Power (kW/HP) 3)	2.2/3.0 1.5/2.0		
Oil tank volume	71		
DIMENSIONS (LxWxH)			
(mm)	525x515x564		
(inch)	20.7x20.3x22.3		
WEIGHT (KG/LBS)			
100/243			
* ACCORDING TO THE FITTING.			



- With standard dies. Crimping range can be increased with special dies.
   Theoretical with 10 mm cycle.
- Asymum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

ABSOLUTE QUALITY MADE IN FINLAND

### CONTROL

MS

#### **OPTIONS**

Mechanical back stop device (part no 705509) Tool base with QuickChange-tool (part no 424474) Tool rack with QuickChange-tool (part no 415663) QuickChange-tool (part no 691043)



Tool base and Tool rack with QuickChange-tool as an option.

### **DIE SET 20-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0

In addition to the standard die sets, a wide range of special die sets is available on request.





### **P32CS**

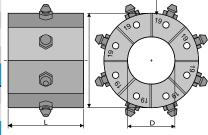
CS-models have been designed for service van use. Also available as Z-model with separate hydraulic unit for better weight balancing and space usage in service van. CS machines are battery powered with 12V or 24V crimping head on left as standard. Right version also available.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	87/3.42
Max crimping dia with master dies (mm/inch)	109/4.3
Max. crimping force (kN)	2000
Max. crimping force (tonnage)	200
Cycle time 10 mm <sup>2)</sup>	21.1
Hydraulic hose size (inch)	2 *
Industrial hose size (inch)	3.42 *
Die set series	32
Max. opening (mm)	+33
Max. opening without dies (mm)	132
Master die D/L (mm)	99/80
Master die D/L (inch)	3.90/3.15
Motor Power (kW) 3)	1.6/2.2
Motor Power (HP) 3)	2.1/3.0
Oil tank volume	51
DIMENSIONS (LxWxH)	
(mm)	626x543x421
(inch)	24.7x21.4x16.6
WEIGHT (KG/LBS)	
125/257	

### **DIMENSIONS P32ZCS (LxWxH)**

Crimping nead (min)	330x309x403
Crimping head (inch)	14x20x15.9
Hydraulic unit (mm)	249x457x326
Hydraulic unit (inch)	9.8x18x12.8
Weight (kg/lbs)	125/257
Hose length (metres)	4





- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle. 12V / 24V. Overload controlled

#### CONTROL

#### **MODELS**

CS left, standard (12V or 24V) CS right (12V or 24V) Z-model

### **OPTIONS**

Tool rack with QuickChange-tool (part no 692740) Mechanical back stop device (part no 705510) QuickChange-tool (part no 701049)



DIE SET 32-SERIES			
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0
In addition to the standard die sets, a wide range of special die sets is available on request.			





ABSOLUTF QUALITY

FINN-POWER

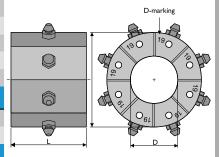
### P32CS SCC

CS-models have been designed for service van use. CS machines are battery powered with 12V or 24V, crimping head on left as standard.

New Smart Crimping Control (SCC) brings smartness and connectivity for service and workshop machines. It is easy to use with features such as diameter crimping, recipes and data recording. A magnetic attachment makes it easy to change the place of control.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	87/3.42
Max crimping dia with master dies (mm/inch)	109/4.3
Max. crimping force (kN)	2000
Max. crimping force (tonnage)	200
Cycle time 10 mm <sup>2)</sup>	21.1
Hydraulic hose size (inch)	2 *
Industrial hose size (inch)	3.42 *
Die set series	32
Max. opening (mm)	+33
Max. opening without dies (mm)	132
Master die D/L (mm)	99/80
Master die D/L (inch)	3.90/3.15
Motor Power (kW) 3)	1.6/2.2
Motor Power (HP) 3)	2.1/3.0
Oil tank volume	51
DIMENSIONS (LxWxH)	
(mm)	601x457x558
(inch)	23.7x18.0x22.0
WEIGHT (KG/LBS)	
130/287	





- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle. 12V / 24V. Overload controlled

### CONTROL

SCC (5" touchscreen)

### **MODELS**

CS SCC left (12V or 24V)

### **OPTIONS**

Mechanical back stop device (part no 705510) Electrical back stop device (part no 720196) Tool rack with QuickChange-tool (part no 692740) Foot pedal (part no 691563) QuickChange-tool (part no 701049)

### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0
In addition to the standard die sets, a wide range			





### **P32X**

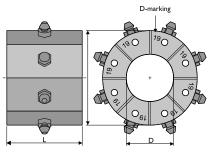
### AFFORDABLE CRIMPER FOR SERVICE USE

Entry level crimping machine for occasional service use and small workshops. For more demanding crimping needs please see P32NMS.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	87/3.42
Max crimping dia with master dies (mm/inch)	109/4.3
Max crimping force (kN)	2000
Max crimping force (tonnage)	200
Cycle time 10 mm (s) 2) 3)	8.7/21.1
Hydraulic hose size (inch)	2 *
Industrial hose size (inch)	3.42 *
Die set series	32
Max opening (mm) 4)	+33
Max opening without dies (mm)	132
Master die D/L (mm)	99/80
Master die D/L (inch)	3.90/3.15
Motor Power (kW/HP) 3)	2.2/3.0 1.5/2.0
Oil tank volume	7
DIMENSIONS (LxWxH)	
(mm)	632x521x567
(inch)	24.9x20.6.x22.4
WEIGHT (KG/LBS)	
155/331	



QuickChange-tool as an option.



- With standard dies. Crimping range can be increased with special dies.
  Theoretical with 10 mm cycle.
  3-phase/1-phase
  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum of the die set used. The result is the maximum opening of the machine with die set in place.



### CONTROL

MS

#### **OPTIONS**

Mechanical back stop device (part no 705510) Tool base with QuickChange-tool (part no 702641) Tool rack with QuickChange-tool (part no 692740) QuickChange-tool (part no 701049)

### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0

In addition to the standard die sets, a wide range of special die sets is available on request.

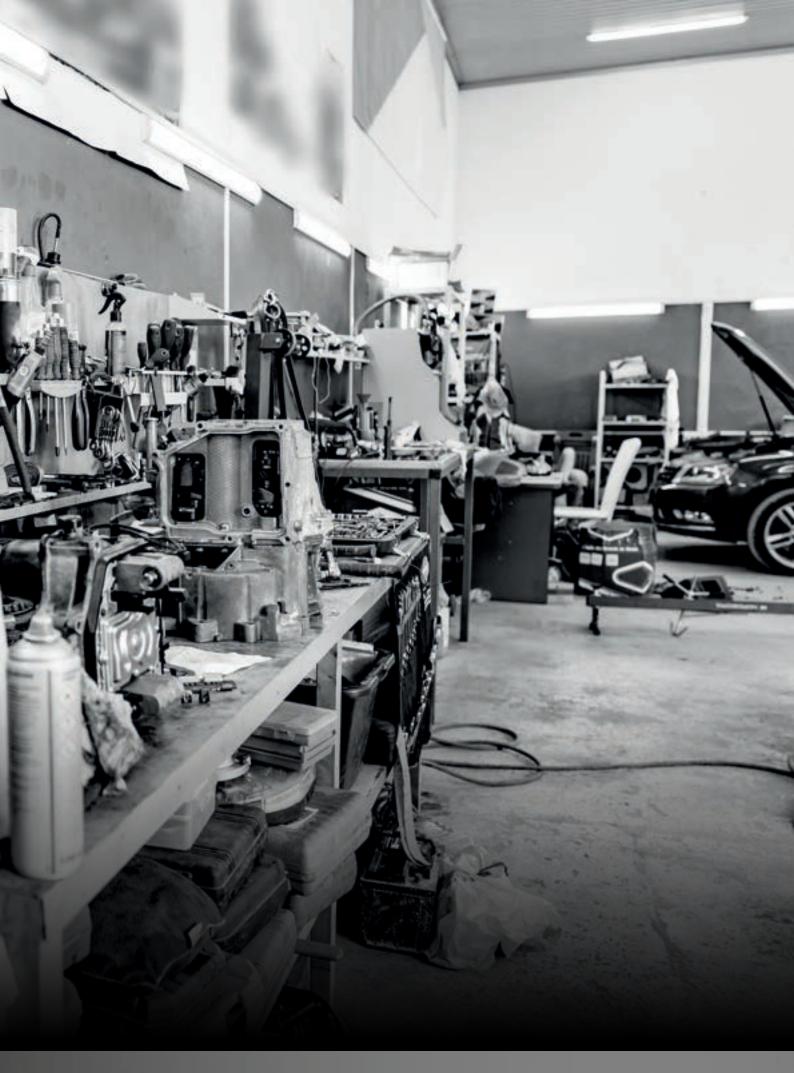




### **WORKSHOP**

Finn-Power workshop category machines are designed with same quality criterias as production machines.

Due to lower crimping volumes and increasing sustainability thinking Finn-Power has designed energy saving motors with sleep mode. Your workshop deserves only the best!



### **WORKSHOP COMPARISON**

TECHNICAL DATA	P20NMS	P2OSCC	P32NMS	P32SCC
Max crimping dia (mm/inch) 1)	61/2.40	61/2.40	87/3.42	87/3.42
Max crimping dia with master dies (mm/inch)	94/3.7	94/3.7	109/4.3	109/4.3
Max crimping force (kN)	1370	1370	2000	2000
Max crimping force (tonnage)	137	137	200	200
Cycle time 10 mm (s) 2) 3)	3.6/10.3	3.6/10.3	4.0/16.1	4.0/16.1
Hydraulic hose size (inch)	1 ½ *	1 ½ *	2 *	2 *
Industrial hose size (inch)	2.40 *	2.40 *	3.42 *	3.42 *
Die set series	20	20	32	32
Max opening (mm) 4)	+25	+25	+33	+33
Max opening without dies (mm)	109	109	132	132
Master die D/L (mm)	84/80	84/80	99/80	99/80
Master die D/L (inch)	3.31/3.15	3.31/3.15	3.90/3.15	3.90/3.15
Motor Power (kW/HP) 3)	3.0/4.0 1.5/2.0	3.0/4.0 1.5/2.0	4.0/5.5 1.5/2.0	4.0/1.5 5.5/2.0
Oil tank volume	27	27	27	27
DIMENSIONS (LxWxH)				
(mm)	650x510x620	650x510x757	675x520x620	675x520x757
(inch)	25.6x20.1x24.4	25.6x20.1x29.8	26.6x20.4x24.4	26.6x20.4x29.8
WEIGHT (KG/LBS)				
	145/309	137/309	190/419	194/427
TECHNICAL DATA	P51MS	P51SCC	P60SCC	P70SCC
TECHNICAL DATA  Max crimping dia (mm/inch) 1)	P51MS 124/4.88	P51SCC 124/4.88	P60SCC 124/4.88	<b>P70SCC</b> 124/4.88
Max crimping dia (mm/inch) 1)  Max crimping dia	124/4.88	124/4.88	124/4.88	124/4.88
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)	124/4.88 150/5.9	124/4.88 150/5.9	124/4.88 150/5.9	124/4.88 150/5.9
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)	124/4.88 150/5.9 2800	124/4.88 150/5.9 2800	124/4.88 150/5.9 2600	124/4.88 150/5.9 4000
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)	124/4.88 150/5.9 2800 280	124/4.88 150/5.9 2800 280	124/4.88 150/5.9 2600 260	124/4.88 150/5.9 4000 400
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)	124/4.88 150/5.9 2800 280 6.1	124/4.88 150/5.9 2800 280 6.1	124/4.88 150/5.9 2600 260 5.8	124/4.88 150/5.9 4000 400 6.8
Max crimping dia (mm/inch) <sup>1)</sup> Max crimping dia with master dies (mm/inch) Max crimping force (kN) Max crimping force (tonnage) Cycle time 10 mm <sup>2)</sup> Hydraulic hose size (inch)	124/4.88 150/5.9 2800 280 6.1 2 ½ *	124/4.88 150/5.9 2800 280 6.1 2 ½ *	124/4.88 150/5.9 2600 260 5.8 2 ½ *	124/4.88 150/5.9 4000 400 6.8 3 *
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)	124/4.88 150/5.9 2800 280 6.1 2 ½ *	124/4.88 150/5.9 2800 280 6.1 2 ½ *	124/4.88 150/5.9 2600 260 5.8 2 ½ *	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 *
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series	124/4.88 150/5.9 2800 280 6.1 2 ½ * 4.88 * 32/140	124/4.88 150/5.9 2800 280 6.1 2 ½ * 4.88 *	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 *	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 *
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46	124/4.88 150/5.9 2800 280 6.1 2 ½ * 4.88 * 32/140 +46	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 * 32/140 +64	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)  Max opening without dies (mm)	124/4.88 150/5.9 2800 280 6.1 2 ½ * 4.88 * 32/140 +46 186	124/4.88 150/5.9 2800 280 6.1 2 ½ * 4.88 * 32/140 +46 186	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 * 32/140 +64 204	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)  Max opening without dies (mm)  Master die D/L (mm)	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 * 32/140 +64 204 140/120	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60 200 140/155
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)  Max opening without dies (mm)  Master die D/L (inch)	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73	124/4.88 150/5.9 2600 260 5.8 2½* 4.88* 32/140 +64 204 140/120 5.52-4.73	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60 200 140/155 5.52-6.1
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)  Max opening without dies (mm)  Master die D/L (mm)  Master die D/L (inch)  Motor Power (kW/HP)	124/4.88 150/5.9 2800 280 6.1 2 ½ * 4.88 * 32/140 +46 186 140/120 5.52-4.73 4 / 5.5	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73 4.0/5.5	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 * 32/140 +64 204 140/120 5.52-4.73 4 / 5.5	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60 200 140/155 5.52-6.1 5.5 / 7.5
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)  Max opening without dies (mm)  Master die D/L (mm)  Motor Power (kW/HP)  Oil tank volume	124/4.88 150/5.9 2800 280 6.1 2 ½ * 4.88 * 32/140 +46 186 140/120 5.52-4.73 4 / 5.5	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73 4.0/5.5	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 * 32/140 +64 204 140/120 5.52-4.73 4 / 5.5	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60 200 140/155 5.52-6.1 5.5 / 7.5
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)  Max opening without dies (mm)  Master die D/L (mm)  Master die D/L (inch)  Motor Power (kW/HP)  Oil tank volume  DIMENSIONS (LxWxH)	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73 4/5.5 801	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73 4.0/5.5 80 I	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 * 32/140 +64 204 140/120 5.52-4.73 4 / 5.5 80 I	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60 200 140/155 5.52-6.1 5.5 / 7.5 80 I
Max crimping dia (mm/inch) 1)  Max crimping dia with master dies (mm/inch)  Max crimping force (kN)  Max crimping force (tonnage)  Cycle time 10 mm 2)  Hydraulic hose size (inch)  Industrial hose size (inch)  Die set series  Max opening (mm) 3)  Max opening without dies (mm)  Master die D/L (mm)  Master die D/L (inch)  Motor Power (kW/HP)  Oil tank volume  DIMENSIONS [LxWxH]  (mm)	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73 4/5.5 801	124/4.88 150/5.9 2800 280 6.1 2½* 4.88* 32/140 +46 186 140/120 5.52-4.73 4.0/5.5 80 I	124/4.88 150/5.9 2600 260 5.8 2 ½ * 4.88 * 32/140 +64 204 140/120 5.52-4.73 4 / 5.5 80 I	124/4.88 150/5.9 4000 400 6.8 3 * 4.88 * 32/140 +60 200 140/155 5.52-6.1 5.5 / 7.5 80 I

- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.

- 3-phase/1-phase
  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used.
  The result is the maximum opening of the machine with die set in place.





### CONTROL

MS

#### **OPTIONS**

Foot pedal (part no 676906)

Mechanical back stop device (part no 705509)

Tool base (20 slots) with QuickChange-tool (part no 710578) Tool rack with QuickChange-tool (part no 415663)

QuickChange-tool (part no 691043)



Foot pedal as an option.



Tool base and Tool rack with QuickChange-tool as an option.

### **DIE SET 20-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0

In addition to the standard die sets, a wide range of special die sets is available on request.

### P20NMS

DESIGNED FOR THE TOUGHEST ENVIRONMENTS

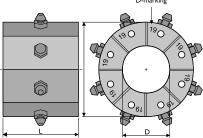
Finn-Power P20NMS is strong, fast and reliable crimping machine for any service crimping need. This model turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	61/2.40
Max crimping dia with master dies (mm/inch)	94/3.7
Max crimping force (kN)	1370
Max crimping force (tonnage)	137
Cycle time 10 mm (s) 2) 3)	3.6/10.3
Hydraulic hose size (inch)	1 ½ *
Industrial hose size (inch)	2.40 *
Die set series	20
Max opening (mm) 4)	+25
Max opening without dies (mm)	109
Master die D/L (mm)	84/80
Master die D/L (inch)	3.31/3.15
Motor Power (kW/HP) 3)	3.0/4.0 1.5/2.0
Oil tank volume	27 I
DIMENSIONS (LxWxH)	
(mm)	650x510x620

25.6x20.1x24.4 (inch) WEIGHT (KG/LBS)

145/309





- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.
- 3-phase/1-phase Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.



ABSOLUTE QUALITY MADE IN FINLAND

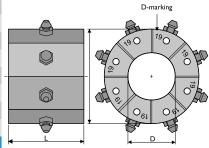
### P20SCC

Finn-Power P2OSCC is strong, fast and reliable crimping machine for any service crimping need. This model turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle.

SCC control brings smartness to workshop crimpers via connectivity and visual user interface, including step crimping as a standard feature. Optional single foot pedal can be connected to workshop SCC models.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	61/2.40
Max crimping dia with master dies (mm/inch)	94/3.7
Max crimping force (kN)	1370
Max crimping force (tonnage)	137
Cycle time 10 mm (s) 2) 3)	3.6/10.3
Hydraulic hose size (inch)	1 ½ *
Industrial hose size (inch)	2.40 *
Die set series	20
Max opening (mm) 4)	+25
Max opening without dies (mm)	109
Master die D/L (mm)	84/80
Master die D/L (inch)	3.31/3.15
Motor Power (kW/HP) 3)	3.0/4.0 1.5/2.0
Oil tank volume	27 I
DIMENSIONS (LxWxH)	
(mm)	650x510x757
(inch)	25.6x20.1x29.8
WEIGHT (KG/LBS)	
137/309	





- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.
- -phase/1-phase
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

### CONTROL

SCC (5" touchscreen)

#### **OPTIONS**

Foot pedal (part no 691563)

Mechanical back stop device (part no 705509)

Electrical back stop device (part no 720197)

Tool base (20 slots) with QuickChange-tool (part no 710578) Tool rack (12 slots) with QuickChange-tool (part no 415663) QuickChange-tool (part no 691043)



Tool base and Tool rack with QuickChange-tool as an option.

### **DIE SET 20-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0

In addition to the standard die sets, a wide range of special die sets is available on request.





### **P32NMS**

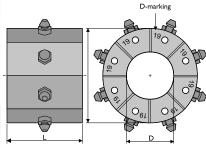
### DESIGNED FOR THE TOUGHEST ENVIRONMENTS

Finn-Power P32NMS is strong, fast and reliable crimping machine for any service crimping need. This model turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	87/3.42
Max crimping dia with master dies (mm/inch)	109/4.3
Max crimping force (kN)	2000
Max crimping force (tonnage)	200
Cycle time 10 mm (s) 2) 3)	4.0/16.1
Hydraulic hose size (inch)	2 *
Industrial hose size (inch)	3.42 *
Die set series	32
Max opening (mm) 4)	+33
Max opening without dies (mm)	132
Master die D/L (mm)	99/80
Master die D/L (inch)	3.90/3.15
Motor Power (kW/HP) 3)	4.0/5.5 1.5/2.0
Oil tank volume	27
DIMENSIONS (LxWxH)	
(mm)	675x520x620
(inch)	26.6x20.4x24.4
WEIGHT (KG/LBS)	
190/419	



Foot pedal as an option.



- With standard dies. Crimping range can be increased with special dies.
   Theoretical with 10 mm cycle.
   3 3-phase/1-phase
   Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

ABSOLUTE QUALITY MADE IN FINLAND

### CONTROL

MS

#### **OPTIONS**

Foot pedal (part no 676906)

Mechanical back stop device (part no 775510) Tool base (20 slots) with QuickChange-tool (part no 710579) Tool rack with QuickChange-tool (part no 692740) QuickChange-tool (part no 701049)



Tool base with QuickChange-tool as an option.



Tool rack with QuickChange-tool as an option.

DIE SET 32-SERIES				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18506/10	10	55	10.0-12.0	
18506/12	12	55	12.0-14.0	
18506/14	14	55	14.0-16.0	
18506/16	16	55	16.0-19.0	
18506/19	19	55	19.0-22.0	
18506/22	22	70	22.0-26.0	
18506/26	26	70	26.0-30.0	
18506/30	30	70	30.0-34.0	
18506/34	34	75	34.0-39.0	
18506/39	39	75	39.0-45.0	
18506/45	45	90	45.0-51.0	
18506/51	51	90	51.0-57.0	
18506/57	57	100	57.0-63.0	
18506/63	63	110	63.0-69.0	
18506/69	69	110	69.0-75.0	
18506/74	74	110	74.0-80.0	
18506/78	78	110	78.0-87.0	
In addition t	o the star	ndard die	sets, a wide range	

of special die sets is available on request.



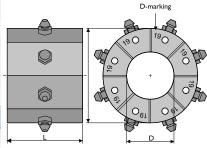
### P32SCC

Finn-Power P32SCC is strong, fast and reliable crimping machine for any service crimping need. This model turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle.

SCC control brings smartness to workshop crimpers via connectivity and visual user interface, including step crimping as a standard feature. Optional single foot pedal can be connected to workshop SCC models.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	87/3.42
Max crimping dia with master dies (mm/inch)	109/4.3
Max crimping force (kN)	2000
Max crimping force (tonnage)	200
Cycle time 10 mm (s) 2) 3)	4.0/16.1
Hydraulic hose size (inch)	2 *
Industrial hose size (inch)	3.42 *
Die set series	32
Max opening (mm) 4)	+33
Max opening without dies (mm)	132
Master die D/L (mm)	99/80
Master die D/L (inch)	3.90/3.15
Motor Power (kW/HP) 3)	4.0/1.5 5.5/2.0
Oil tank volume	27
DIMENSIONS (LxWxH)	
(mm)	675x520x757
(inch)	26.6x20.4x29.8
WEIGHT (KG/LBS)	
194/427	





- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.
- 3-phase/1-phase
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.



### CONTROL

SCC (5" touchscreen)

#### **OPTIONS**

Foot pedal (part no 691563)

Mechanical back stop device (part no 705510)

Electrical back stop device (part no 720196)

Tool base (20 slots) with QuickChange-tool (part no 710579) Tool rack (16 slots) with QuickChange-tool (part no 692740) QuickChange-tool (part no 701049)





DIE SET 32-SERIES				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18506/10	10	55	10.0-12.0	
18506/12	12	55	12.0-14.0	
18506/14	14	55	14.0-16.0	
18506/16	16	55	16.0-19.0	
18506/19	19	55	19.0-22.0	
18506/22	22	70	22.0-26.0	
18506/26	26	70	26.0-30.0	
18506/30	30	70	30.0-34.0	
18506/34	34	75	34.0-39.0	
18506/39	39	75	39.0-45.0	
18506/45	45	90	45.0-51.0	
18506/51	51	90	51.0-57.0	
18506/57	57	100	57.0-63.0	
18506/63	63	110	63.0-69.0	
18506/69	69	110	69.0-75.0	
18506/74	74	110	74.0-80.0	
18506/78	78	110	78.0-87.0	
In addition to the standard die sets, a wide range				

of special die sets is available on request.









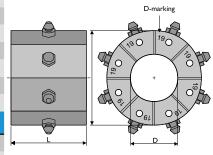
### **P51MS**

### POWERFUL TABLE TOP CRIMPER

Multi-purpose table top crimping machine for hydraulic and industrial hoses. Easy part positioning with fixed center point crimping head. The wide opening makes it possible to crimp industrial hoses up to 4 inches (ID).

Thakes to possible to crimi	p
TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	124/4.88
Max crimping dia with master dies (mm/inch)	150/5.9
Max crimping force (kN)	2800
Max crimping force (tonnage)	280
Cycle time 10 mm <sup>2)</sup>	6.1
Hydraulic hose size (inch)	2 ½ *
Industrial hose size (inch)	4.88 *
Die set series	32/140
Max opening (mm) 3)	+46
Max opening without dies (mm)	186
Master die D/L (mm)	140/120
Master die D/L (inch)	5.52-4.73
Motor Power (kW/HP)	4 / 5.5
Oil tank volume	80 I
DIMENSIONS (LxWxH)	
(mm)	865x553x812
(inch)	34.1x21.8x31.9
WEIGHT (KG/LBS)	
298/656	

Foot pedal as an option.



- With standard dies. Crimping range can be increased with special dies.
  Theoretical with 10 mm cycle.
  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

### CONTROL

MS

### STANDARD FEATURES

Adapter dies (part no 402604) Mechanical back stop device

### **OPTIONS**

Foot pedal (part no 676906)

Mirror (part no 720200)

Tool base with QuickChange-tool (part no 720198) Tool rack with QuickChange-tool (part no 692740) QuickChange-tool (part no 701049)

### **DIE SET 140-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18860/84	84	110	84.0-92.0
18860/92	92	110	92.0-100.0
18860/100	100	110	100.0-108.0
18860/108	108	110	108.0-116.0
18860/116	116	110	116.0-124.0

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0
In addition t	to the star	ndard die	sets, a wide range

of special die sets is available on request.





ABSOLUTF QUALITY /IADE IN FINLAND

P51SCC

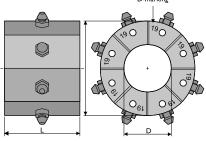
#### POWERFUL TABLE TOP CRIMPER

Multi-purpose table top crimping machine for hydraulic and industrial hoses. Easy part positioning with fixed center point crimping head. This model turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle. The wide opening makes it possible to crimp industrial hoses up to 4 inches (ID).

SCC control brings smartness to workshop crimpers via connectivity and visual user interface, including step crimping as a standard feature. Optional single foot pedal can be connected to workshop SCC models.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	124/4.88
Max crimping dia with master dies (mm/inch)	150/5.9
Max crimping force (kN)	2800
Max crimping force (tonnage)	280
Cycle time 10 mm <sup>2)</sup>	6.1
Hydraulic hose size (inch)	2 ½ *
Industrial hose size (inch)	4.88 *
Die set series	32/140
Max opening (mm) 3)	+46
Max opening without dies (mm)	186
Master die D/L (mm)	140/120
Master die D/L (inch)	5.52-4.73
Motor Power (kW/HP)	4.0/5.5
Oil tank volume	80 I
DIMENSIONS (LxWxH)	
(mm)	865x553x871
(inch)	34.1x2 1.8x34.3
WEIGHT (KG/LBS)	
298/656	





With standard dies. Crimping range can be increased with special dies.
Theoretical with 10 mm cycle.

Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

### CONTROL

SCC (5" touchscreen)

#### STANDARD FEATURES

Adapter dies (part no 402604)

#### **OPTIONS**

Foot pedal (part no 691563) Mirror (part no 720200)

Electrical back stop device (part no 720195)

Mechanical back stop device (part no 720194)

Tool base with QuickChange-tool (part no 720198) Tool rack with QuickChange-tool (part no 692740)

QuickChange-tool (part no 701049)

### **DIE SET 140-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18860/84	84	110	84.0-92.0
18860/92	92	110	92.0-100.0
18860/100	100	110	100.0-108.0
18860/108	108	110	108.0-116.0
18860/116	116	110	116.0-124.0

### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0

In addition to the standard die sets, a wide range



### P60SCC

LARGE OPENING

Workshop crimper for large camlock -style couplings with increased opening diameter. Ideal machine for small to mid-range industrial hoses.

This model turns hydraulics off to conserve energy, and to reduce workplace noise levels whenever the machine is idle.

SCC control brings smartness to workshop crimpers via connectivity and visual user interface, including step crimping as a standard feature. Optional single foot pedal can be connected to workshop SCC models.

TECHNICAL DATA			
Max crimping dia (mm/inch) 1)	124/4.88		
Max crimping dia with master dies (mm/inch)	150/5.9		
Max crimping force (kN)	2600		
Max crimping force (tonnage)	260		
Cycle time 10 mm <sup>2)</sup>	5.8		
Hydraulic hose size (inch)	2 ½ *		
Industrial hose size (inch)	4.88 *		
Die set series	32/140		
Max opening (mm) 3)	+64		
Max opening without dies (mm)	204		
Master die D/L (mm)	140/120		
Master die D/L (inch)	5.52-4.73		
Motor Power (kW/HP)	4 / 5.5		
Oil tank volume	80 I		
DIMENSIONS (LxWxH)			
(mm)	865x553x871		
(inch)	34.1x21.8x34.3		
WEIGHT (KG/LBS)			
298/656			
* ACCORDING TO THE FITTING.			

6

Foot pedal as an option.

With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.

Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

### ABSOLUTE QUALITY MADE IN FINLAND

#### CONTROL

SCC (5" touchscreen) \*

#### STANDARD FEATURES

Adapter dies (part no 402604)

Mechanical back stop device (part no 720194)

#### **OPTIONS**

Foot pedal (part no 691563)

Mirror (part no 720200)

Electrical back stop device (part no 720195)

Tool base with QuickChange-tool (part no 720198) Tool rack with QuickChange-tool (part no 692740)

QuickChange-tool (part no 701049)

\* MS-control also available



### **DIE SET 140-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18860/84	84	110	84.0-92.0
18860/92	92	110	92.0-100.0
18860/100	100	110	100.0-108.0
18860/108	108	110	108.0-116.0
18860/116	116	110	116.0-124.0

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)		
18506/10	10	55	10.0-12.0		
18506/12	12	55	12.0-14.0		
18506/14	14	55	14.0-16.0		
18506/16	16	55	16.0-19.0		
18506/19	19	55	19.0-22.0		
18506/22	22	70	22.0-26.0		
18506/26	26	70	26.0-30.0		
18506/30	30	70	30.0-34.0		
18506/34	34	75	34.0-39.0		
18506/39	39	75	39.0-45.0		
18506/45	45	90	45.0-51.0		
18506/51	51	90	51.0-57.0		
18506/57	57	100	57.0-63.0		
18506/63	63	110	63.0-69.0		
18506/69	69	110	69.0-75.0		
18506/74	74	110	74.0-80.0		
18506/78	78	110	78.0-87.0		
In addition to the standard die sets, a wide range					

of special die sets is available on request.





### CONTROL

SCC (5" touchscreen)

#### STANDARD FEATURES

Adapter dies (part no 704631) Mirror (part no 720878)

#### **OPTIONS**

Foot pedal (part no 691563)

Electric backstop

Mechanical back stop device

Tool base with QuickChange-tool for P32 dies, 18 slots (part no 720198)

Tool base with QuickChange-tool for P32 dies, 8 slots for 140 dies / 6 slots for 32 dies (part no 719124)

Tool rack with QuickChange-tool (part no 692740) QuickChange-tool (part no 701049)



#### **DIE SET 140-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18860/84	84	110	84.0-92.0
18860/92	92	110	92.0-100.0
18860/100	100	110	100.0-108.0
18860/108	108	110	108.0-116.0
18860/116	116	110	116.0-124.0

### **DIE SET 145-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18860/84/120	84	120	84.0-92.0
18860/92/120	92	120	92.0-100.0
18860/100/120	100	120	100.0-108.0
18860/108/120	108	120	108.0-116.0
18860/116/120	116	120	116.0-124.0

### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0

In addition to the standard die sets, a wide range of special die sets is available on request.

QUICK CHANGE TOOL AVAILABLE FOR 32-SERIES DIES.





### P70SCC

### MORE POWER AND LARGE OPENING

Largest table top machine with more power and wider opening to crimp the heavy duty fittings. P7OSCC is ideal machine also for small to mid range industrial hoses.

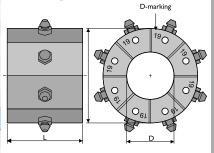
TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	124/4.88
Max crimping force (kN)	4000
Max crimping force (tonnage)	400
Cycle time 10 mm <sup>2)</sup>	6.8
Hydraulic hose size (inch)	3 *
Industrial hose size (inch)	4.88 *
Die set series	32/140
Max opening (mm) 3)	+60
Max opening without dies (mm)	200
Master die D/L (mm)	140/155
Master die D/L (inch)	5.52-6.1
Motor Power (kW/HP)	5.5/7.5
Oil tank volume	80 I
DIMENSIONS (LxWxH)	
(mm)	912x559x907
(inch)	35.9x22x35.7

WEIGHT (KG/LBS)

ACCORDING TO THE FITTING.

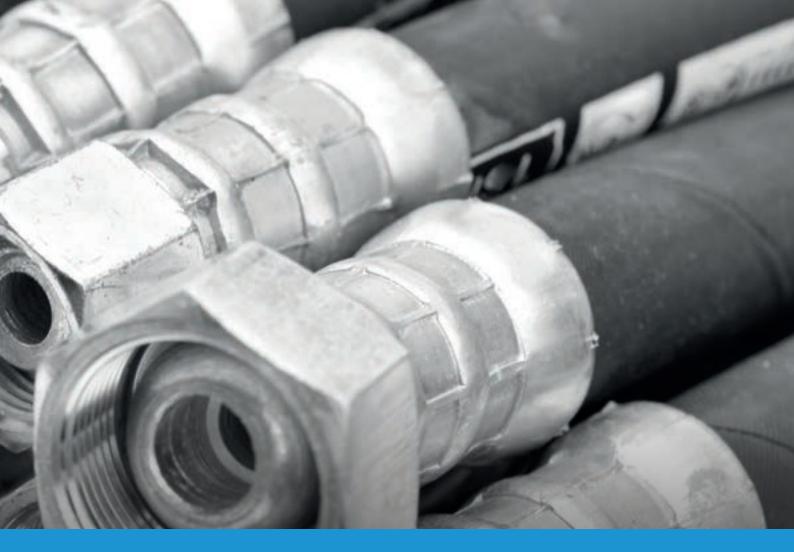
461/1014





- With standard dies. Crimping range can be increased with special dies.
  Theoretical with 10 mm cycle.
  Maximum opening is the total die travel. Add
- this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

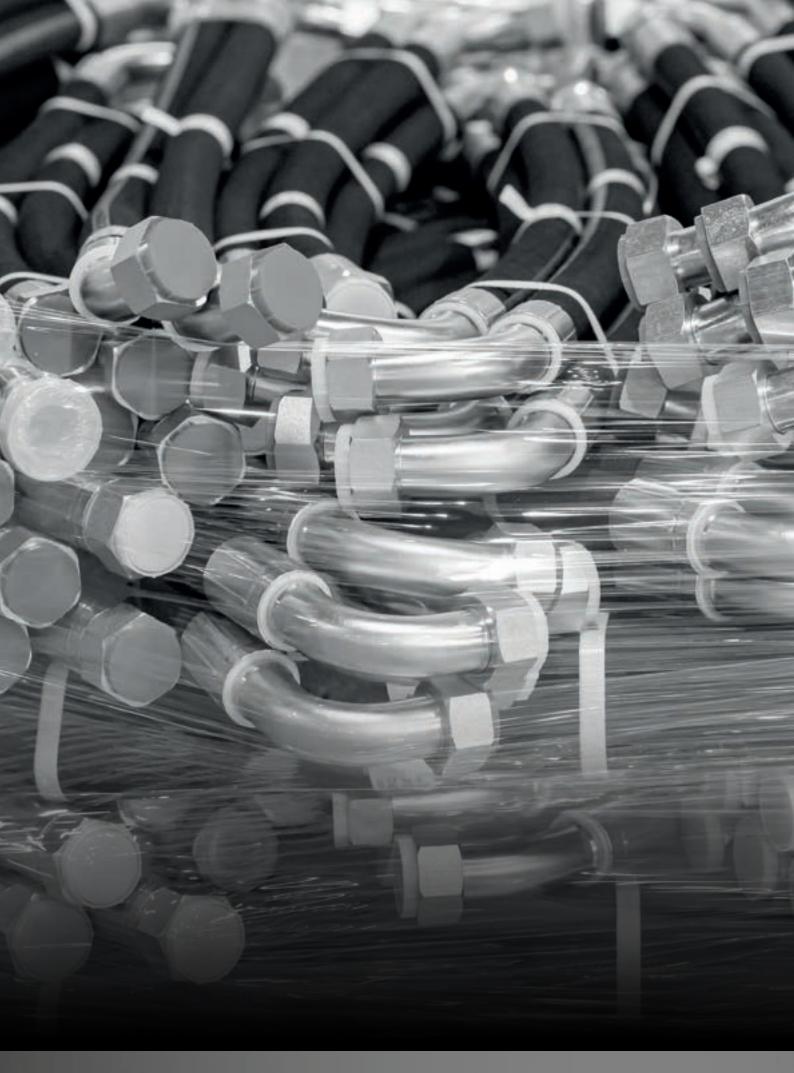




## **PRODUCTION**

Production category machines have been designed for high volume production with the best possible repeatability, accuracy and roundness.

All production machines have pressure crimping and step crimping as standard. Multiple layout options are available for many production machines to improve accessibility, ergonomics or comfort.



### PRODUCTION COMPARISON





TECHNICAL DATA	FP20	FP120	FP140	FP145	FP160	FP165	FP170	FP175
Max crimping dia (mm/inch) 1)	61/2.4	87/3.42	124/4.88	124/4.88	202/7.95	202/7.95	320/12.60	320/12.60
Max crimping dia with master dies (mm/inch)	94/3.7	109/4.3	150/5.9	150/5.9	230/9	230/9	330/13	330/13
Max. crimping force (kN)	1500	2800	3200	3500	3500	5000	6600	8300
Max. crimping force (tonnage)	150	280	320	350	350	500	660	830
Cycle time 10 mm (s) 2)	1.9 (S-model: 1.4)	1.8 (S-model: 1.6)	2.3 (S-model: 1.6)	2.5	2.3	3.6	3.1	3.2
Hydraulic hose size (inch)	1 ½ *	2 *	2 ½ *	2 ½ *	6 *	6 *	10 *	10 *
Industrial hose size (inch)	2.4 *	3.42 *	4.88 *	4.88 *	7.95 *	7.95 *	12.60 *	12.60 *
Die set series 3)	20	32	32/140	32/140/145	32/160	32/160	32/160/170	32/160/170
Max. opening (mm) 4)	+68	+68	+82	+82	+125	+125	+155	+155
Max. opening without dies (mm)	152	167	222	222	345	345	475	475
Master die D/L (mm)	84/97	99/97	140/97	140/116	220/116	220/116	320/220	320/220
Master die D/L (inch)	3.90/3.82	3.90/3.82	5.52/3.82	5.52/4.57	8.66/4.57	8.66/4.57	12.60/8.66	12.60/8.66
Motor Power (kW/HP)	3.0/4.0	6.5/8.8	6.5/8.8	6.5/8.8	6.5/8.8	6.5/8.8	7.5/10	11/15
Oil tank volume	135	135 I	135 I	135 I	135 I	135 I	250	250
DIMENSIONS (LxWxH)								
Machine (mm)	640x700x1372	881X664X1561	881x664x1561	881x683x1561	940x860x1784	1060x860x1825	1200x936x2220	1200x936x2220
Hydraulic Unit (mm)	713x705x1060	782X753X1043	782x753x1043	782x753x1043	782x753x1043	782x753x1043	1195x705x1411	1195x705x1411
Machine (inch)	25.2x27.6x54.0	34.7X26.1X61.5	34.7x26.1x61.5	34.7x26.9x61.5	37x33.9x70.2	41.7x33.9x71.9	47.3x36.9x81.9	47.3x36.9x81.9
Hydraulic Unit (inch)	28.1x27.8x41.7	30.8X29.6X41.0	30.8x29.6x41.0	30.8x29.6x41.0	30.8x29.6x41.0	30.8x29.6x41.0	47.0x27.8x44.9	47.0x27.8x44.9
WEIGHT (KG/LBS)								
Machine	504/1109	875/1925	905/1991	1053/2317	2020/4444	2480/5412	4400/9669	4455/9801
Hydraulic Unit	150/330	220/484	220/484	220/484	220/484	220/484	265/671	305/671
Compact setup	710/1562	1060/2332						

#### ACCORDING TO THE FITTING.

- With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle. See table for die set data.

- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.







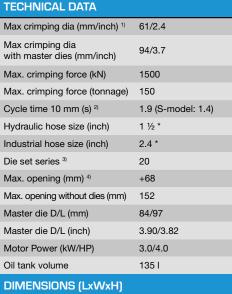


SPEED, PRECISION AND QUALITY

FP20 is the first step towards high scale production with automatic quality control and other advanced options.

FP20 is the powerful little brother of our famous FP120. It's ideal for high volume production up to 1 1/2" 4-wire hydraulic hoses. It supplied with built-in die storage (14 slots) and Quick Change-tool as standard.

FP20 is available with separate hydraulic unit or as a compact model.



Machine (mm)	640x700x1372
Hydraulic Unit (mm)	713x705x1060
Machine (inch)	25.2x27.6x54.0
Hydraulic Unit (inch)	28.1x27.8x41.7

#### WEIGHT (KG/LBS)

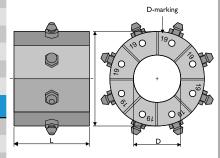
Machine	504/1109
Hydraulic Unit	150/330
Compact setup	710/1562

### **ACCORDING TO THE FITTING.**



FINN-POWER

Die sets can be installed into the master dies with a QuickChange-tool one set at a time.



- With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle.
- See table for die set data.
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC (7" touchscreen) or SCC (5" touchscreen)

#### STANDARD FEATURES

QuickChange-tool (part no 691043) Electric backstop device (part no 705183) Mirror (part no 404136) Pressure crimping (ICC only)

Step crimping

#### **OPTIONS (SCC & ICC)**

Foot pedal (part no 691563)

Mechanical back stop device (part no 704920) Interface pack ETH (communication TCP/IP & UDP) Oil cooler J3 \*\*

Combi unit (crimping and hydraulic unit combined)

Pinning support mandrel

Camera with 7" display

\*\* Will have impact on motor size, hydraulic unit dimensions and weight.

#### **OPTIONS (ICC ONLY)**

Smart die rack SDR (8 slot) Quality control ICC3 Graphical quality control ICC4

Auto greasing G3 Bar Code Reader BCR

Speed adjustment \*

Oil Condition Monitoring OCM

Industry 4.0

\*\* Will have impact on motor size, hydraulic unit dimensions and weight



Electric backstop device as a standard feature.



FP20ICC and FP20SCC are supplied with built-in die storage (14 slots)

#### **DIE SET 20-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0

In addition to the standard die sets, a wide range





New FP120 is compact and easy to use, designed to handle the highest production volumes.

Unbeaten in terms of speed, precision, durability and quality. Depending on available space, or the space need behind the machine, the hydraulic and crimping unit can be separated or combined.

TE(	CH	NIC	AL	DA	TA

Max crimping dia (mm/inch) 1)	87/3.42	
Max crimping dia with master dies (mm/inch)	109/4.3	
Max. crimping force (kN)	2800	
Max. crimping force (tonnage)	280	
Cycle time 10 mm (s) 2)	1.8 (S-model: 1.6)	
Hydraulic hose size (inch)	2 *	
Industrial hose size (inch)	3.42 *	
Die set series 3)	32	
Max. opening (mm) 4)	+68	
Max. opening without dies (mm)	167	
Master die D/L (mm)	99/97	
Master die D/L (inch)	3.90/3.82	
Motor Power (kW/HP)	6.5/8.8	
Oil tank volume	135 I	

#### DIMENSIONS (LxWxH)

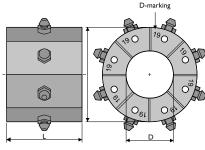
Machine (mm)	881X664X1561
Hydraulic Unit (mm)	782X753X1043
Machine (inch)	34.7X26.1X61.5
Hydraulic Unit (inch)	30.8X29.6X41.0

#### WEIGHT (KG/LBS)

Machine	875/1925
Hydraulic Unit	220/484
Compact setup	1060/2332

### \* ACCORDING TO THE FITTING.





- With standard dies. Crimping range can be 1) increased with special dies.
  Theoretical with 10 mm cycle.
  Hydraulic hose / industrial hose
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

ABSOLUTF QUALITY MADE IN FINLAND

#### CONTROL

ICC (7" touchscreen) or SCC (5" touchscreen)

#### STANDARD FEATURES

QuickChange-tool (part no 701049) Electric backstop device (part no 705183) Mirror (part no 054010) Die racks (part no: 714267 (left), 714266 (right))

Pressure crimping (ICC only)

#### **OPTIONS (SCC & ICC)**

Foot pedal (part no 691563) Side table (part no: 719216 (right), 719152 (left) Side die rack, 5 slots (Compact only) (part no 717685) Die rack, 9 slots (not for compact) (part no: 714266 (right), 714267 (left) Mechanical back stop device (part no 704920) Interface pack ETH (Communication TCP/IP & UDP)

Oil cooler J3 \*\* Combi unit (crimping and hydraulic unit combined)

Pinning support mandrel

Horizontal Back layout HB

Horizontal Side layout HS

\*\* Will have impact on motor size, hydraulic unit dimensions and weight

#### **OPTIONS (ICC ONLY)**

Smart die rack SDR (8 or 16 slot model available)

Quality control ICC3 Graphical quality control ICC4

Auto greasing G3

Bar Code Reader BCR

Speed adjustment

Oil Condition Monitoring OCM

Industry 4.0

A3 signal

Camera with 7" display

\*\* Will have impact on motor size, hydraulic unit dimensions and weight.

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0



FINLAND



Finn-Power FP120 with new SCC control.

SCC control brings smartness to serial production crimpers via connectivity and visual user interface, including step crimping as a standard feature. The control brings necessary basic features for entry-level higher volume production.

FP120SCC is compact and easy to use, designed to handle the highest production volumes.

Unbeaten in terms of speed, precision, durability and quality. Depending on available space, or the operational space need behind the machine, the hydraulic and crimping unit can be separated or combined.

#### **TECHNICAL DATA** Max crimping dia (mm/inch) 1) 87/3.42 Max crimping dia 109/4.3 with master dies (mm/inch) 2800 Max. crimping force (kN) Max. crimping force (tonnage) Cycle time 10 mm (s) 2) 1.8 (S-model: 1.6) 2 \* Hydraulic hose size (inch) 3.42 \* Industrial hose size (inch) Die set series 32 Max. opening (mm) 3) +68 Max. opening without dies (mm) 167 Master die D/L (mm) 99/97 Master die D/L (inch) 3.90/3.82 Motor Power (kW/HP) 6.5/8.8 135 I Oil tank volume

#### **DIMENSIONS (LxWxH)**

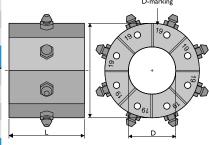
Machine (mm)	881X664X1561
Hydraulic Unit (mm)	782X753X1043
Machine (inch)	34.7X26.1X61.5
Hydraulic Unit (inch)	30.8X29.6X41.0

#### WEIGHT (KG/LBS)

Machine	875/1925
Hydraulic Unit	220/484
Compact setup	1060/2332

#### **ACCORDING TO THE FITTING.**





With standard dies. Crimping range can be increased with special dies.
Theoretical with 10 mm cycle.

Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### **CONTROL**

SCC (5" touchscreen)

#### STANDARD FEATURES

QuickChange-tool (part no 701049) Electric backstop device (part no 705183) Mirror (part no 054010) Die racks (part no: 714267 (left), 714266 (right)

#### **OPTIONS**

Foot pedal (part no 691563) Side table (part no: 719216 (right), 719152 (left) Side die rack, 5 slots (Compact only) (part no 717685) Die rack, 9 slots (not for compact)

(part no: 714266 (right), 714267 (left) Mechanical back stop device (part no 704920)

Interface pack ETH (Communication TCP/IP & UDP) Oil cooler J3 \*\*

Combi unit (crimping and hydraulic unit combined) Pinning support mandrel

Horizontal Back layout HB Horizontal Side lavout HS

\*\* Will have impact on motor size, hydraulic unit dimensions and weight

#### DIE SET 32-SERIES

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0







FP140

#### POWERFUL BUT VERSATILE

Big brother of the famous FP120 with more force, bigger opening and larger dies. The 140-series die system with adaptor dies makes an excellent choice for large, medium and even small size fittings. Great machine also for medium range industrial hoses.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	124/4.88
Max crimping dia with master dies (mm/inch)	150/5.9
Max. crimping force (kN)	3200
Max. crimping force (tonnage)	320
Cycle time 10 mm (s) 2)	2.3 (S-model: 1.6)
Hydraulic hose size (inch)	2 ½ *
Industrial hose size (inch)	4.88 *
Die set series	32/140
Max. opening (mm) 3)	+82
Max. opening without dies (mm)	222
Master die D/L (mm)	140/97
Master die D/L (inch)	5.52/3.82
Motor Power (kW/HP)	6.5/8.8
Oil tank volume	135 I
DIMENSIONS (LxWxH)	

Machine (mm)	881x664x1561
Hydraulic Unit (mm)	782x753x1043
Machine (inch)	34.7x26.1x61.5
Hydraulic Unit (inch)	30.8x29.6x41.0

#### WEIGHT (KG/LBS)

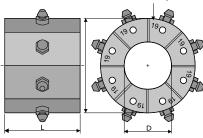
Machine	905/1991
Hydraulic Unit	220/484

\* ACCORDING TO THE FITTING.



Side die rack as an option, 5 slots (Compact only)

D-marking



- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### **ABSOLUTE** QUALITY ⁄IADE IN ÆINLAND

#### CONTROL

ICC (7" touchscreen) or SCC (5" touchscreen)

#### STANDARD FEATURES

QuickChange-tool (part no 701049) Electric backstop device (part no 705183) Mirror (part no 054010) Die racks (part no: 714267 (left), 714266 (right)

Adapter dies for 32-series dies (part no 703772)

Pressure crimping (ICC only) Step crimpina

#### **OPTIONS (SCC & ICC)**

Foot pedal (part no 691563) Side table (part no: 719216 (right), 719152 (left) Side die rack, 5 slots (Compact only) (part no 717685) Die rack, 9 slots (not for compact) (part no: 714266 (right), 714267 (left) Mechanical back stop device (part no 704920) Interface pack ETH (Communication TCP/IP & UDP) Oil cooler J3 \*\* Combi unit (crimping and hydraulic unit combined)

Pinning support mandrel Horizontal Back layout HB

Horizontal Side layout HS

\*\* Will have impact on motor size, hydraulic unit dimensions and weight

#### OPTIONS (ICC ONLY)

Smart die rack SDR (8 or 16 slot model available) Quality control ICC3 Graphical quality control ICC4 Auto greasing G3 Bar Code Reader BCR Speed adjustment 3 Oil Condition Monitoring OCM

Industry 4.0 A3 signal

Camera with 7" display

\*\* Will have impact on motor size, hydraulic unit dimensions and weight.

#### **DIE SET 140-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18860/84/110	84	110	84.0-92.0
18860/92/110	92	110	92.0-100.0
18860/100/110	100	110	100.0-108.0
18860/108/110	108	110	108.0-116.0
18860/116/110	116	110	116.0-124.0

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63/110	63	110	63.0-69.0
18506/69/110	69	110	69.0-75.0
18506/74/110	74	110	74.0-80.0
18506/78/110	78	110	78.0-87.0







Big brother of the famous FP120 with more force, bigger opening and larger dies.

The 140-series die system with adaptor dies makes an excellent choice for large, medium and

FP145 is an ideal machine for 2" 6-wire hoses and also for medium range industrial hoses.

and also for friedlatti ange industrial noses				
TECHNICAL DATA				
Max crimping dia (mm/inch) 1)	124/4.88			
Max crimping dia with master dies (mm/inch)	150/5.9			
Max. crimping force (kN)	3500			
Max. crimping force (tonnage)	350			
Cycle time 10 mm (s) 2)	2.5			
Hydraulic hose size (inch)	2 ½ *			
Industrial hose size (inch)	4.88 *			
Die set series	32/140/145			
Max. opening (mm) 3)	+82			
Max. opening without dies (mm)	222			
Master die D/L (mm)	140/116			
Master die D/L (inch)	5.52/4.57			
Motor Power (kW/HP)	6.5/8.8			
Oil tank volume	135 I			
DIMENSIONS (LxWxH)				
Machine (mm)	881x683x1561			
Hydraulic Unit (mm)	782x753x1043			
Machine (inch)	34.7x26.9x61.5			

### WEIGHT (KG/LBS)

Hydraulic Unit (inch)

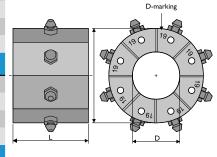
Machine	1053/2317
Hydraulic I Init	220/484

30.8x29.6x41.0

#### \* ACCORDING TO THE FITTING.



Side die rack as an option, 5 slots (Compact only)



- With standard dies. Crimping range can be
- With standard clies. Crimping range can be increased with special clies. Theoretical with 10 mm cycle. Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

### ABSOLUTF QUALITY MADE IN FINLAND

#### **CONTROL**

ICC (7" touchscreen) or SCC (5" touchscreen)

#### STANDARD FEATURES

QuickChange-tool (part no 701049) Electric backstop device (part no 705183)

Mirror (part no 054010)

Step crimping

Adapter dies for 32-series dies (part no 704631)

Die racks (part no: 714267 (left), 714266 (right)

Pressure crimping (ICC only)

#### **OPTIONS (SCC & ICC)**

Foot pedal (part no 691563)

Side table (part no: 719216 (right), 719152 (left)

Side die rack, 5 slots (Compact only) (part no 717685)

Die rack, 9 slots (not for compact)

(part no: 714266 (right), 714267 (left)

Mechanical back stop device (part no 704920)

Interface pack ETH (Communication TCP/IP & UDP)

Combi unit (crimping and hydraulic unit combined)

Pinning support mandrel

Horizontal Back layout HB Horizontal Side layout HS

\*\* Will have impact on motor size, hydraulic unit dimensions and weight

#### **OPTIONS (ICC ONLY)**

Smart die rack SDR (8 or 16 slot model available)

Quality control ICC3

Graphical quality control ICC4

Auto greasing G3

Bar Code Reader BCR Speed adjustment

Oil Condition Monitoring OCM

Industry 4.0

A3 signal

Camera with 7" display

\*\* Will have impact on motor size, hydraulic unit dimensions and weight.

#### **DIE SET 145-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18860/84/120	84	120	84.0-92.0
18860/92/120	92	120	92.0-100.0
18860/100/120	100	120	100.0-108.0
18860/108/120	108	120	108.0-116.0
18860/116/120	116	120	116.0-124.0

#### **DIE SET 32-SERIES**

ı	DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
ı	18506/10	10	55	10.0-12.0
ı	18506/12	12	55	12.0-14.0
ı	18506/14	14	55	14.0-16.0
ı	18506/16	16	55	16.0-19.0
ı	18506/19	19	55	19.0-22.0
ı	18506/22	22	70	22.0-26.0
ı	18506/26	26	70	26.0-30.0
ı	18506/30	30	70	30.0-34.0
ı	18506/34	34	75	34.0-39.0
ı	18506/39	39	75	39.0-45.0
ı	18506/45	45	90	45.0-51.0
ı	18506/51	51	90	51.0-57.0
ı	18506/57	57	100	57.0-63.0
ı	18506/63/120	63	120	63.0-69.0
ı	18506/69/120	69	120	69.0-75.0
ı	18506/74/120	74	120	74.0-80.0
ı	18506/78/120	78	120	78.0-87.0







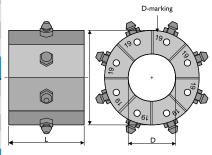
FP160

#### POWERFUL BUT VERSATILE

FP160 is a versatile crimping machine in our production category. It is optimal for hoses with bigger flanges and fittings supplied with in-built die set storage.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	202/7.95
Max crimping dia with master dies (mm/inch)	230/9
Max. crimping force (kN)	3500
Max. crimping force (tonnage)	350
Cycle time 10 mm (s) 2)	2.3
Hydraulic hose size (inch)	6 *
Industrial hose size (inch)	7.95 *
Die set series	32/160
Max. opening (mm) 3)	+125
Max. opening without dies (mm)	345
Master die D/L (mm)	220/116
Master die D/L (inch)	8.66/4.57
Motor Power (kW/HP)	6.5/8.8
Oil tank volume	135 I
DIMENSIONS (LxWxH)	
Machine (mm)	940x860x1784
Hydraulic Unit (mm)	782x753x1043
Machine (inch)	37x33.9x70.2
Hydraulic Unit (inch)	30.8x29.6x41.0
WEIGHT (KG/LBS)	
Machine	2020/4444
Hydraulic Unit	220/484





- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

ABSOLUTE/ QUALITY MADE IN FINLAND

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

QuickChange-tool (part no 701049) Electric backstop device (part no 691562) Mirror (part no 054010)

Adapter dies for 32-series dies (part no 302008) Foot pedal (part no 691563)

Pressure crimping ICC1

Step crimping ICC2

#### **OPTIONS**

Smart die rack SDR (16 slot)

Mechanical back stop device (part no 704920)

Auto greasing G3

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Oil cooler J3 \*\*

Pinning support mandrel

Quality control ICC3 Graphical quality control ICC4

Bar Code Reader BCR

Speed adjustment \*\*

Oil Condition Monitoring OCM

Industry 4.0

Camera with 7" display Horizontal Back layout HB

Horizontal Side layout HS

Will have impact on motor size, hydraulic unit dimensions and weight

#### **DIE SET 160-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18852/84	84	116	84.0-92.0
18852/92	92	116	92.0-100.0
18852/100	100	116	100.0-108.0
18852/108	108	116	108.0-116.0
18852/116	116	116	116.0-126.0
18852/126	126	116	126.0-136.0
18852/136	136	116	136.0-146.0
18852/146	146	116	146.0-156.0
18852/156	156	116	156.0-166.0
18852/166	166	116	166.0-178.0
18852/178	178	116	178.0-190.0
18852/190	190	116	190.0-202.0

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0

In addition to the standard die sets, a wide range of special die sets is available on request.

\* ACCORDING TO THE FITTING.

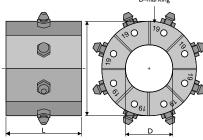


POWERFUL PARTNER

FP165 is more powerful version of FP160. You can manage all hydraulic hoses and ideal also for medium range industrial hoses with flanges and large fittings.

TECHNICAL DATA		
Max crimping dia (mm/inch) 1)	202/7.95	
Max crimping dia with master dies (mm/inch)	230/9	
Max. crimping force (kN)	5000	
Max. crimping force (tonnage)	500	
Cycle time 10 mm (s) 2)	3.6	
Hydraulic hose size (inch)	6 *	
Industrial hose size (inch)	7.95 *	
Die set series	32/160	
Max. opening (mm) 3)	+125	
Max. opening without dies (mm)	345	
Master die D/L (mm)	220/116	
Master die D/L (inch)	8.66/4.57	
Motor Power (kW/HP)	6.5/8.8	
Oil tank volume	135 I	
DIMENSIONS (LxWxH)		
Machine (mm)	1060x860x1825	
Hydraulic Unit (mm)	782x753x1043	
Machine (inch)	41.7x33.9x71.9	
Hydraulic Unit (inch)	30.8x29.6x41.0	
WEIGHT (KG/LBS)		
Machine	2480/5412	
Hydraulic Unit	220/484	
* ACCORDING TO THE FIT	TTING.	





- With standard dies. Crimping range can be
- with standard dies. Crimping range can be increased with special dies.
  Theoretical with 10 mm cycle.
  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum prepring of the machine with die set in place. opening of the machine with die set in place.

### ABSOLUTE/ QUALITY MADE IN FINLAND

#### CONTROL

ICC (7" touchscreen)

#### **STANDARD FEATURES**

QuickChange-tool (part no 701049)

Electric backstop device (part no 691562)

Mirror (part no 054010)

Adapter dies for 32-series dies (part no 302008)

Foot pedal (part no 691563)

Pressure crimping ICC1

Step crimping ICC2

#### **OPTIONS**

Smart die rack SDR (16 slot)

Mechanical back stop device (part no 704920)

Auto greasing G3

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Oil cooler J3 \*\*

Pinning support mandrel

Quality control ICC3

Graphical quality control ICC4 Bar Code Reader BCR

Speed adjustment \*\*

Oil Condition Monitoring OCM

Industry 4.0

Camera with 7" display

Horizontal Back layout HB Horizontal Side layout HS

Will have impact on motor size, hydraulic unit dimensions and weight

#### **DIE SET 160-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18852/84	84	116	84.0-92.0
18852/92	92	116	92.0-100.0
18852/100	100	116	100.0-108.0
18852/108	108	116	108.0-116.0
18852/116	116	116	116.0-126.0
18852/126	126	116	126.0-136.0
18852/136	136	116	136.0-146.0
18852/146	146	116	146.0-156.0
18852/156	156	116	156.0-166.0
18852/166	166	116	166.0-178.0
18852/178	178	116	178.0-190.0
18852/190	190	116	190.0-202.0

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0

In addition to the standard die sets, a wide range of special die sets is available on request.

46



FP170

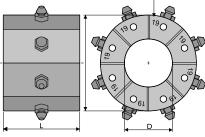
**TECHNICAL DATA** 

ABSOLUTE QUALITY MADE IN FINLAND

#### STRONG WITH WIDE OPENING

FP170 machine is primarily designed for crimping large fittings and applications requiring large opening. FP170 is widely used in tube and pipe industry as well as electric insulators and several automotive applications. FP170 with extra long master dies provides long forming with single stroke.

Max crimping dia (mm/inch) 1)	320/12.60			
Max crimping dia with master dies (mm/inch)	330/13			
Max. crimping force (kN)	6600			
Max. crimping force (tonnage)	660			
Cycle time 10 mm (s) 2)	3.1			
Hydraulic hose size (inch)	10 *			
Industrial hose size (inch)	12.60 *			
Die set series	323 / 1603 / 170			
Max. opening (mm) 4)	+155			
Max. opening without dies (mm)	475			
Master die D/L (mm)	320/220			
Master die D/L (inch)	12.60/8.66			
Motor Power (kW/HP)	7.5/10			
Oil tank volume	250 I			
DIMENSIONS (LxWxH)				
Machine (mm)	1200x936x2220			
Hydraulic Unit (mm)	1195x705x1411			
Machine (inch)	47.3x36.9x81.9			
Hydraulic Unit (inch)	47.0x27.8x44.9			
WEIGHT (KG/LBS)				
Machine	4400/9669			
Hydraulic Unit 265/671				
* ACCORDING TO THE FITTING.				



D-marking

- With standard dies. Crimping range can be 1) increased with special dies. Theoretical with 10 mm cycle. With adapter dies
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Adapter dies for FP160-series dies (part no 404916) Foot pedal (part no 691563)

Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Adapter dies for 32-series dies (part no 302008)

QuickChange-tool 32-series dies (part no 701049)

Smart die rack SDR (16 slot) Auto greasing G3

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Oil cooler J3\*\*

Pinning support mandrel

Quality control ICC3 Graphical quality control ICC4

Bar Code Reader BCR

Speed adjustment \*

Oil Condition Monitoring OCM

Industry 4.0

Camera with 7" display

Horizontal Back layout HB Horizontal Side layout HS

\*\* Will have impact on motor size, hydraulic unit dimensions and weight

#### **DIE SET 170-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
405060/205	205	220	205.0-220.0
405060/220	220	220	220.0-235.0
405060/235	235	220	235.0-250.0
405060/250	250	220	250.0-270.0
405060/270	270	220	270.0-290.0
405060/290	290	220	290.0-320.0

#### **DIE SET 160-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18852/84	84	116	84.0-92.0
18852/92	92	116	92.0-100.0
18852/100	100	116	100.0-108.0
18852/108	108	116	108.0-116.0
18852/116	116	116	116.0-126.0
18852/126	126	116	126.0-136.0
18852/136	136	116	136.0-146.0
18852/146	146	116	146.0-156.0
18852/156	156	116	156.0-166.0
18852/166	166	116	166.0-178.0
18852/178	178	116	178.0-190.0
18852/190	190	116	190.0-202.0

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18506/10	10	55	10.0-12.0	
18506/12	12	55	12.0-14.0	
18506/14	14	55	14.0-16.0	
18506/16	16	55	16.0-19.0	
18506/19	19	55	19.0-22.0	
18506/22	22	70	22.0-26.0	
18506/26	26	70	26.0-30.0	
18506/30	30	70	30.0-34.0	
18506/34	34	75	34.0-39.0	
18506/39	39	75	39.0-45.0	
18506/45	45	90	45.0-51.0	
18506/51	51	90	51.0-57.0	
18506/57	57	100	57.0-63.0	
18506/63	63	110	63.0-69.0	
18506/69	69	110	69.0-75.0	
18506/74	74	110	74.0-80.0	
18506/78	78	110	78.0-87.0	
In addition to the standard die sets, a wide range				

of special die sets is available on request.



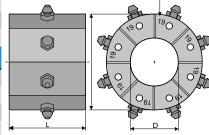
FP175

ABSOLUTF QUALITY MADE IN FINLAND

#### STRONG WITH WIDE OPENING

FP175 is the flagship of the FP-series with 830tons force and 12" crimping diameter. It is suitable for wide range of applications requiring large capacity in force and diameter. FP175 with extra long master dies provides long forming with single stroke especially in tube and pipe applications.

TECHNICAL DATA	TECHNICAL DATA					
Max crimping dia (mm/inch) 1)	320/12.60					
Max crimping dia with master dies (mm/inch)	330/13					
Max. crimping force (kN)	8300					
Max. crimping force (tonnage)	830					
Cycle time 10 mm (s) 2)	3.2					
Hydraulic hose size (inch)	10 *					
Industrial hose size (inch)	12.60 *					
Die set series	323/ 1603/ 170					
Max. opening (mm) 4)	+155					
Max. opening without dies (mm)	475					
Master die D/L (mm)	320/220					
Master die D/L (inch)	12.60/8.66					
Motor Power (kW/HP)	11/15					
Oil tank volume	250					
DIMENSIONS (LxWxH)						
Machine (mm)	1200x936x2220					
Hydraulic Unit (mm)	1195x705x1411					
Machine (inch)	47.3x36.9x81.9					
Hydraulic Unit (inch)	47.0x27.8x44.9					
WEIGHT (KG/LBS)						
Machine	4455/9801					
Hydraulic Unit	305/671					
* ACCORDING TO THE FIT	TTING.					



D-marking

- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle. With adapter dies
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Adapter dies for FP160-series dies (part no 404916) Foot pedal (part no 691563)

Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Adapter dies for 32-series dies (part no 302008)

QuickChange-tool 32-series dies (part no 701049)

Smart die rack SDR (16 slot)

Auto greasing G3

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Oil cooler J3\*

Pinning support mandrel

Quality control ICC3

Graphical quality control ICC4

Bar Code Reader BCR

Speed adjustment \*\*

Oil Condition Monitoring OCM

Industry 4.0

Camera with 7" display Horizontal Back layout HB

Horizontal Side layout HS

\*\* Will have impact on motor size, hydraulic unit dimensions and weight

#### **DIE SET 170-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
405060/205	205	220	205.0-220.0
405060/220	220	220	220.0-235.0
405060/235	235	220	235.0-250.0
405060/250	250	220	250.0-270.0
405060/270	270	220	270.0-290.0
405060/290	290	220	290.0-320.0

#### **DIE SET 160-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18852/84	84	116	84.0-92.0
18852/92	92	116	92.0-100.0
18852/100	100	116	100.0-108.0
18852/108	108	116	108.0-116.0
18852/116	116	116	116.0-126.0
18852/126	126	116	126.0-136.0
18852/136	136	116	136.0-146.0
18852/146	146	116	146.0-156.0
18852/156	156	116	156.0-166.0
18852/166	166	116	166.0-178.0
18852/178	178	116	178.0-190.0
18852/190	190	116	190.0-202.0

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0



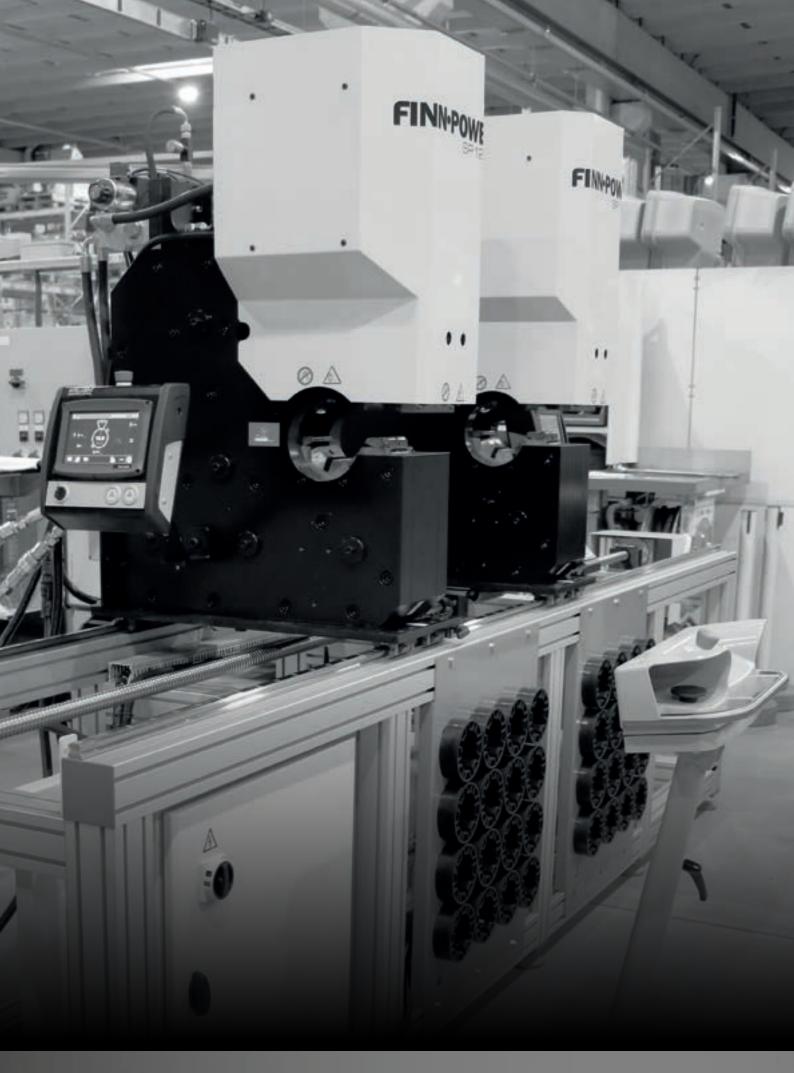




# SIDE FEED

Side Feed category machines are originally designed for complex bended hoses in automotive industry, but open c-frame enables easier feeding for various other products as well.

Finn-Power has wide range of side feed machines from small scale production to heavy duty.



### SIDE FEED COMPARISON





TECHNICAL DATA	SP100	SP350	SP1200	SP2000	SP5000
Crimping range (mm) 1)	10-46	10-54	10-54	10-54	10-210
Crimping range (inch) 1)	0.39-1.81	0.39-2.12	0.39-2.12	0.39-2.12	0.39-8.26
Max. crimping force (kN)	100	350	1200	2000	5000
Max. crimping force (tonnage)	10	35	120	200	500
Cycle time 10 mm (s) 2)	1.9 (S-model: 0.9)	1.1 (S-model: 0.7)	2.1 (S-model: 1.3)	2.4	3.7
Hose size ID (inch)	1 1/4	1 1/4	1 1/4	1 1/4	6
Die set series 3)	SP100	CC22	CC22	20	32/160
Max. opening (mm) 4)	+11/+62	+25/+48	+25/+63	+25/+63	+46/+215
Master die D/L (mm)	70/40	84/78	84/78	84/78	220/190
Master die D/L (inch)	2.75/1.58	3.31/3.07	3.31/3.07	1.81/3.0	8.66/7.48
Motor Power (kW/HP)	3.0/4.0	3.0/4.0	4.0/5.5	6.5/8.8	7.5/10.0
Oil tank volume	50	50 I	50 I	135 I	250
DIMENSIONS (LxWxH)					
Machine (mm)	814x782x1670	970x1020x1871	970x1020x2030	1062x970x2004	1510x950x2250
Hydraulic Unit (mm)				713x705x1060	713x705x1060
Machine (inch)	32.0x30.8x65.7	38.2x40.2x73.7	38.2x40.2x80.0	59.4x37.4x88.6	59.4x37.4x88.6
Hydraulic Unit (inch)				28.0x27.8x41.7	28.0x27.8x41.7
WEIGHT (KG/LBS)					
Machine	383/844	710/2050	1256/2976	1940/3936	3930/8650
Hydraulic Unit				182/402	280/485

- With standard dies. Crimping range can be increased with special dies.
  Theoretical with 10mm cycle.
  See table for die set data.
  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used.
  The result is the maximum opening of the machine with die set in place.





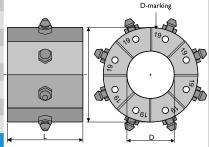
Finn-Power SP-series crimping machines with open C-frame structure are optimal for crimping any odd shape, bent or otherwise complex hose assemblies.

SP100 with 10 ton force is specially designed for small automotive hoses.

TECHNICAL DATA	
Crimping range (mm) 1)	10-46
Crimping range (inch) 1)	0.39-1.81
Max. crimping force (kN)	100
Max. crimping force (tonnage)	10
Cycle time 10 mm (s) 2)	1.9 (S-model: 0.9)
Hose size ID (inch)	1 1/4
Die set series 3)	SP100
Max. opening (mm) 4)	+11/+62
Master die D/L (mm)	70/40
Master die D/L (inch)	2.75/1.58
Motor Power (kW/HP)	3.0/4.0
Oil tank volume	50 I
DIMENSIONS (LxWxH)	
Machine (mm)	814x782x1670
Machine (inch)	32.0x30.8x65.7
WEIGHT (KG/LBS)	
383/844	

SP100 also available in following configurations:

- Z-model with separate crimping head and hydraulic unit
- S-model with enhanced cycle time
- D-model with double head configuration (on request)



- With standard dies. Crimping range can be increased with special dies.
   Theoretical with 10mm cycle.
- 3) See table for die set data.
- 4) Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

ABSOLUTF QUALITY MADE IN FINLAND

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Foot pedal (part no 691563) Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Foot pedal, Z-model (part no 691563)

Auto greasing G3

Remote control unit R2 (double hand)

Quality control ICC3

Graphical quality control ICC4

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Bar Code Reader BCR

#### **DIE SET SP100-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
701817/10	10	40	10.0-12.0
701817/12	12	40	12.0-14.0
701817/14	14	40	14.0-16.0
701817/16	16	40	16.0-19.0
701817/19	19	40	19.0-23.0
701817/23	23	40	23.0-27.0
701817/27	27	40	27.0-31.0
701817/31	31	40	31.0-36.0
701817/36	36	40	36.0-41.0
701817/41	41	40	41.0-47.0
701817/47	47	40	47.0-54.0





Finn-Power SP-series crimping machines with open C-frame structure are optimal for crimping any odd shape, bent or otherwise complex hose assemblies.

SP350 with 35 ton force is designed for demanding automotive hoses and other bent components requiring side feeding. SP350 has adjustable crimp head angle for easier part orientation and visibility. SP350 comes with moveable swing arm for ICC control.

TECHNICAL DATA	
Crimping range (mm) 1)	10-54
Crimping range (inch) 1)	0.39-2.12
Max. crimping force (kN)	350
Max. crimping force (tonnage)	35
Cycle time 10 mm (s) 2)	1.1 (S-model: 0.7)
Hose size ID (inch)	1 1/4
Die set series 3)	CC22
Max. opening (mm) 4)	+25/+48
Master die D/L (mm)	84/78
Master die D/L (inch)	3.31/3.07
Motor Power (kW/HP)	3.0/4.0
Oil tank volume	50 I
DIMENSIONS (LxWxH)	
Machine (mm)	970x1020x1871
Machine (inch)	38.2x40.2x73.7
WEIGHT (KG/LBS)	
710/2050	

SP350 also available in following configurations:

- Z-model with separate crimping head and hydraulic unit
- S-model with enhanced cycle time
- configuration (on request)

- D-model with double head

# 6

- With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle.
- See table for die set data. Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### **CONTROL**

ICC (7" touchscreen)

#### STANDARD FEATURES

Foot pedal (part no 691563) QuickChange-tool (part no 691043) Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Foot pedal (Z-model) (part no 691563) Auto greasing G3 Remote control unit R2 (double hand) Quality control ICC3 Graphical quality control ICC4 Interface pack ETH (Communication TCP/IP & UDP) A3 signal Bar Code Reader BCR Oil Condition Monitoring OCM

#### **DIE SET CC22-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18315/10	10	50	10.0-12.0
18315/12	12	50	12.0-14.0
18315/14	14	50	14.0-16.0
18315/16	16	50	16.0-19.0
18315/19	19	50	19.0-23.0
18315/23	23	50	23.0-27.0
18315/27	27	50	27.0-31.0
18315/31	31	50	31.0-36.0
18315/36	36	50	36.0-41.0
18315/41	41	50	41.0-47.0
18315/47	47	50	47.0-54.0





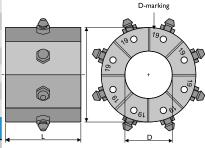
Finn-Power SP-series crimping machines with open C-frame structure are optimal for crimping any odd shape, bent or otherwise complex hose assemblies.

TECHNICAL DATA	
Crimping range (mm) 1)	10-54
Crimping range (inch) 1)	0.39-2.12
Max. crimping force (kN)	1200
Max. crimping force (tonnage)	120
Cycle time 10 mm (s) 2)	2.1 (S-model: 1.3)
Hose size ID (inch)	1 1/4
Die set series 3)	CC22
Max. opening (mm) 4)	+25/+63
Master die D/L (mm)	84/78
Master die D/L (inch)	3.31/3.07
Motor Power (kW/HP)	4.0/5.5
Oil tank volume	50 I
DIMENSIONS (LxWxH)	
Machine (mm)	970x1020x2030
Machine (inch)	38.2x40.2x80.0
WEIGHT (KG/LBS)	
1256/2976	

SP1200 also available in following configurations:

- Z-model with separate crimping head and hydraulic unit
- S-model with enhanced cycle time
- D-model with double head configuration (on request)

See details from specific product cards.



- With standard dies. Crimping range can be increased with special dies.
   Theoretical with 10mm cycle.
- 3) See table for die set data.
- 4) Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC (7" touchscreen)

#### **STANDARD FEATURES**

Foot pedal (part no 691563) QuickChange-tool (part no 691043) Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Foot pedal (Z-model) (part no 691563) Auto greasing G3 Remote control unit R2 (double hand) Quality control ICC3

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Bar Code Reader BCR
Oil Condition Monitoring OCM

on condition wormoring cow

Graphical quality control ICC4

#### DIE SET CC22-SERIES

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18315/10	10	50	10.0-12.0
18315/12	12	50	12.0-14.0
18315/14	14	50	14.0-16.0
18315/16	16	50	16.0-19.0
18315/19	19	50	19.0-23.0
18315/23	23	50	23.0-27.0
18315/27	27	50	27.0-31.0
18315/31	31	50	31.0-36.0
18315/36	36	50	36.0-41.0
18315/41	41	50	41.0-47.0
18315/47	47	50	47.0-54.0





Finn-Power SP-series crimping machines with open C-frame structure are optimal for crimping any odd shape, bent or otherwise complex hose assemblies.

SP2000 with 200 ton force is designed for heavier bent hose assemblies and small tubular components with large flanges.

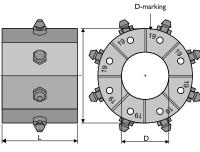
TECHNICAL DATA	
Crimping range (mm) 1)	10-54
Crimping range (inch) 1)	0.39-2.12
Max. crimping force (kN)	2000
Max. crimping force (tonnage)	200
Cycle time 10 mm (s) 2)	2.4
Hose size ID (inch)	1 1/4
Die set series 3)	20
Max. opening (mm) 4)	+25/+63
Master die D/L (mm)	84/78
Master die D/L (inch)	1.81/3.0
Motor Power (kW/HP)	6.5/8.8
Oil tank volume	135 I
DIMENSIONS (LxWxH)	
Machine (mm)	1062x970x2004
Hydraulic Unit (mm)	713x705x1060
Machine (inch)	59.4x37.4x88.6
Hydraulic Unit (inch)	28.0x27.8x41.7
WEIGHT (KG/LBS)	
Machine	1940/3936

Hydraulic Unit

SP2000 also available in following configurations:

- S-model with enhanced cycle time
- D-model with double head configuration (on request)

See details from specific product cards.



- With standard dies. Crimping range can be increased with special dies.
   Theoretical with 10mm cycle.
- 3) See table for die set data.
- 4) Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

ABSOLUTE QUALITY MADE IN FINLAND

#### CONTROL

ICC (7" touchscreen)

#### **STANDARD FEATURES**

Foot pedal (part no 691563) QuickChange-tool (part no 691043) Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Foot pedal (Z-model) (part no 691563)
Remote control unit R2 (double hand)
Quality control ICC3
Graphical quality control ICC4
Interface pack ETH (Communication TCP/IP & UDP)
A3 signal
Bar Code Reader BCR

#### DIE SET 20-SERIES

Oil Condition Monitoring OCM

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0

In addition to the standard die sets, a wide range of special die sets is available on request.

182/402





ABSOLUTE QUALITY MADE IN FINLAND

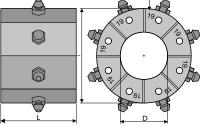
Finn-Power SP-series crimping machines with open C-frame structure are optimal for crimping any odd shape, bent or otherwise complex hose assemblies.

SP5000 with 500 ton force is a heavy duty side feed machine for demanding industrial hoses or pipes with large flanges.

SP5000 is ideal also for various pipeline field installations in e.g. offshore, oil & gas, water & wastewater industries.

See details from specific product cards.

TECHNICAL DATA	
Crimping range (mm) 1)	10-210
Crimping range (inch) 1)	0.39-8.26
Max. crimping force (kN)	5000
Max. crimping force (tonnage)	500
Cycle time 10 mm (s) 2)	3.7
Hose size ID (inch)	6
Die set series 3)	32/160
Max. opening (mm) 4)	+46/+215
Master die D/L (mm)	220/190
Master die D/L (inch)	8.66/7.48
Motor Power (kW/HP)	7.5/10.0
Oil tank volume	250
DIMENSIONS (LxWxH)	
Machine (mm)	1510x950x2250
Hydraulic Unit (mm)	713x705x1060
Machine (inch)	59.4x37.4x88.6
	28.0x27.8x41.7
Hydraulic Unit (inch)	
WEIGHT (KG/LBS)	
	3930/8650
WEIGHT (KG/LBS)	3930/8650 280/485



With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle.

See table for die set data.

Maximum opening is the total die travel.
Add this value to the minimum crimping
diameter of the die set used. The result
is the maximum opening of the machine with die set in place.

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

#### Foot pedal (part no 691563)

QuickChange-tool for 32-series dies (part no 701049) Pressure crimping ICC1

#### Step crimping ICC2 **OPTIONS**

Quality control ICC3

Graphical quality control ICC4

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

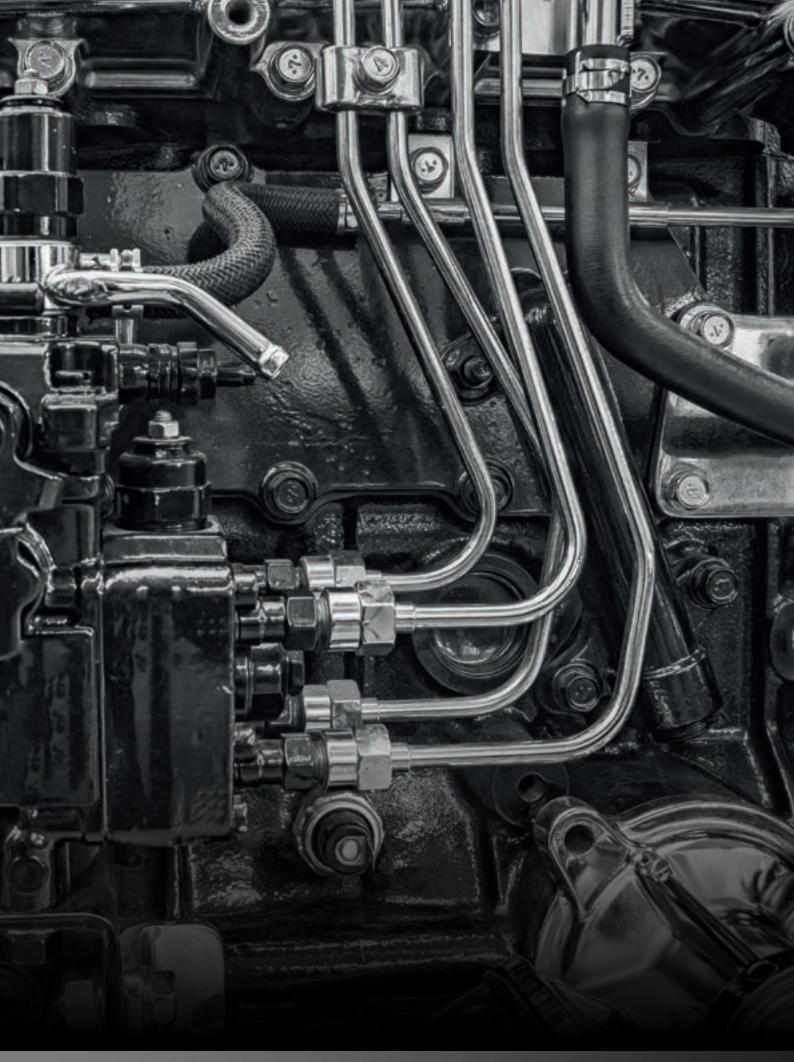
Bar Code Reader BCR Oil Condition Monitoring OCM

#### **DIE SET 32-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18506/10	10	55	10.0-12.0
18506/12	12	55	12.0-14.0
18506/14	14	55	14.0-16.0
18506/16	16	55	16.0-19.0
18506/19	19	55	19.0-22.0
18506/22	22	70	22.0-26.0
18506/26	26	70	26.0-30.0
18506/30	30	70	30.0-34.0
18506/34	34	75	34.0-39.0
18506/39	39	75	39.0-45.0
18506/45	45	90	45.0-51.0
18506/51	51	90	51.0-57.0
18506/57	57	100	57.0-63.0
18506/63	63	110	63.0-69.0
18506/69	69	110	69.0-75.0
18506/74	74	110	74.0-80.0
18506/78	78	110	78.0-87.0

#### **DIE SET 160-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18852/84	84	116	84.0-92.0
18852/92	92	116	92.0-100.0
18852/100	100	116	100.0-108.0
18852/108	108	116	108.0-116.0
18852/116	116	116	116.0-126.0
18852/126	126	116	126.0-136.0
18852/136	136	116	136.0-146.0
18852/146	146	116	146.0-156.0
18852/156	156	116	156.0-166.0
18852/166	166	116	166.0-178.0
18852/178	178	116	178.0-190.0
18852/190	190	116	190.0-202.0



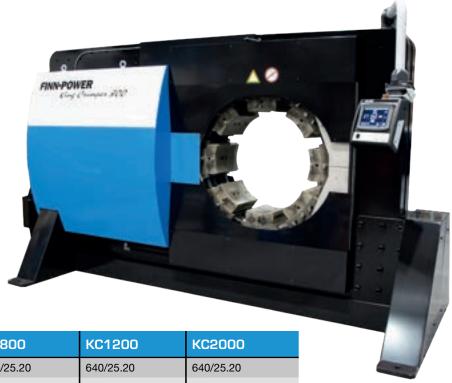




# **HEAVY DUTY**

Heady Duty category machines are designed for jobs where large diameters and/or forces are needed. Heavy Duty machines are always equipped with the best possible options!

### **HEAVY DUTY COMPARISON**



TECHNICAL DATA	KC800	KC1200	KC2000
Max crimping dia (mm/inch) 1)	640/25.20	640/25.20	640/25.20
Max crimping dia with master dies (mm/inch)	650/25.6	650/25.6	650/25.6
Max. crimping force (kN)	8 000	12 000	20 000
Max. crimping force (tonnage)	800	1200	2 000
Cycle time 10 mm (s) 2)	3.2	5.2	7.7
Hydraulic hose size (inch)	16 *	16 *	16 *
Industrial hose size (inch)	25.20 *	25.20 *	25.20 *
Die set series 3)	160 / 170	160 <sup>5)</sup> / 170	160 <sup>5)</sup> / 170
Max. opening (mm) 4)	+180	+180	+180
Max. opening without dies (mm)	820	820	820
Master die D/L (mm)	640/300	640/300	640/300
Master die D/L (inch)	25.20/11.8	25.20/11.8	25.20/11.8
Motor Power (kW/HP)	11/15	11/15	11/15
Oil tank volume	250 I	250	250
DIMENSIONS (LxWxH)			
Machine (mm)	2825x1345x2040	3015x1345x2291	3380x1345x2361
Hydraulic Unit (mm)	1195x705x1411	1195x705x1411	1195x705x1411
Machine (inch)	111.2x53.0x80.3	118.7x53.0x90.2	113.0x52.9x92.9
Hydraulic Unit (inch)	47.0x27.8x44.9	47.0x27.8x44.9	47.0x27.8x44.9
WEIGHT (KG/LBS)			
Machine	9 680/22046	12 000/27 116	15 500/32628
Hydraulic Unit	305/772	305/772	305/772

#### \* ACCORDING TO THE FITTING.

- With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle See table for die set data
- Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.
- With adapter dies.



### KING CRIMPER 800

#### THE KING OF CRIMPERS

The King Crimper's extremely large opening and enormous crimping force coupled with the world's most advanced crimping control means there are literally no limitations to what it can crimp. The King Crimper's robust frame design ensures consistent repeatability. The ICC Control on a swing arm and remote control device allows the operator to crimp hard to crimp objects and while keeping them safe and in control of the process. The primary markets for 'the King' are oil & gas and transportation for crimping pipes, tubes and fittings.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	640/25.20
Max crimping dia with master dies (mm/inch)	650/25.6
Max. crimping force (kN)	8 000
Max. crimping force (tonnage)	800
Cycle time 10 mm (s) 2)	3.2
Hydraulic hose size (inch)	16 *
Industrial hose size (inch)	25.20 *
Die set series 3)	160/170
Max. opening (mm) 4)	+180
Max. opening without dies (mm)	820
Master die D/L (mm)	640/300
Master die D/L (inch)	25.20/11.8
Motor Power (kW/HP)	11/15
Oil tank volume	250
DIMENSIONS (LxWxH)	
Machine (mm)	2825x1345x2040

Machine (mm)	2825x1345x2040
Hydraulic Unit (mm)	1195x705x1411
Machine (inch)	111.2x53.0x80.3
Hydraulic Unit (inch)	47.0x27.8x44.9

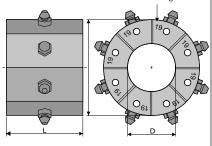
#### WEIGHT (KG/LBS)

Machine	9 680/22046
Hydraulic Unit	305/772

#### **ACCORDING TO THE FITTING.**



Remote control unit as a standard feature.



- With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle
- See table for die set data Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum

opening of the machine with die set in place.

### ABSOLUTE QUALITY MADE IN FINLAND

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Foot pedal (part no 691563)

Adapter dies for 170-series die sets, L300 (part no 705485)

Auto greasing G3

Remote control unit R1 Pressure crimping ICC1

Step crimping ICC2

Quality control ICC3

Graphical quality control ICC4

Interface pack ETH (Communication TCP/IP & UDP) Camera with 7" display

Bar Code Reader BCR

#### **OPTIONS**

Oil Condition Monitoring OCM

Adapter dies for 160-series die sets, L220 (part no 404916) Oil cooler J3





Camera with display as a standard feature

#### **DIE SET 170-SERIES**

н				
I	DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
ı	405060/205	205	220	205.0-220.0
ı	405060/220	220	220	220.0-235.0
ı	405060/235	235	220	235.0-250.0
ı	405060/250	250	220	250.0-270.0
ı	405060/270	270	220	270.0-290.0
ı	405060/290	290	220	290.0-320.0

#### **DIE SET 160-SERIES**

_				
1	DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
	18852/84	84	116	84.0-92.0
	18852/92	92	116	92.0-100.0
	18852/100	100	116	100.0-108.0
	18852/108	108	116	108.0-116.0
	18852/116	116	116	116.0-126.0
	18852/126	126	116	126.0-136.0
	18852/136	136	116	136.0-146.0
	18852/146	146	116	146.0-156.0
	18852/156	156	116	156.0-166.0
	18852/166	166	116	166.0-178.0
	18852/178	178	116	178.0-190.0
	18852/190	190	116	190.0-202.0

In addition to the standard die sets, a wide range of special die sets is available on request.

D-marking



### **KING CRIMPER 1200**

THE KING OF CRIMPERS

The King Crimper's extremely large opening and enormous crimping force coupled with the world's most advanced crimping control means there are literally no limitations to what it can crimp. The King Crimper's robust frame design ensures consistent repeatability. The ICC Control on a swing arm and remote control device allows the operator to crimp hard to crimp objects and while keeping them safe and in control of the process. The primary markets for 'the King' are oil & gas and transportation for crimping pipes, tubes and fittings.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	640/25.20
Max crimping dia with master dies (mm/inch)	650/25.6
Max. crimping force (kN)	12 000
Max. crimping force (tonnage)	1200
Cycle time 10 mm (s) 2)	5.2
Hydraulic hose size (inch)	16 *
Industrial hose size (inch)	25.20 *
Die set series 3)	160 <sup>5)</sup> / 170
Max. opening (mm) 4)	+180
Max. opening without dies (mm)	820
Master die D/L (mm)	640/300
Master die D/L (inch)	25.20/11.8
Motor Power (kW/HP)	11/15
Oil tank volume	250 I
DIMENSIONS (LxWxH)	

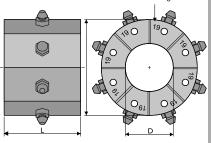
Machine (mm)	3015x1345x2291
Hydraulic Unit (mm)	1195x705x1411
Machine (inch)	118.7x53.0x90.2
Hydraulic Unit (inch)	47.0x27.8x44.9
WEIGHT (KG /I BS)	

Machine	12 000/27 116
Hydraulic Unit	305/772

### ACCORDING TO THE FITTING.



Remote control unit as a standard feature.



- With standard dies. Crimping range can be increased with special dies.
  Theoretical with 10 mm cycle.
- See table for die set data.

  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place. With adapter dies.

### **ABSOLUTE** QUALITY MADE IN FINLAND

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Foot pedal (part no 691563)

Adapter dies for 170-series die sets, L300 (part no 705485)

Auto greasing G3

Remote control unit R1 Pressure crimping ICC1

Step crimping ICC2

Quality control ICC3

Graphical quality control ICC4 Interface pack ETH (Communication TCP/IP & UDP)

Camera with 7" display

Bar Code Reader BCR

#### **OPTIONS**

Oil Condition Monitoring OCM

Adapter dies for 160-series die sets, L220 (part no 404916) Oil cooler J3





Camera with display as a standard feature

**DIE SET 170-SERIES** 

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
405060/205	205	220	205.0-220.0
405060/220	220	220	220.0-235.0
405060/235	235	220	235.0-250.0
405060/250	250	220	250.0-270.0
405060/270	270	220	270.0-290.0
405060/290	290	220	290.0-320.0

#### **DIE SET 160-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18852/84	84	116	84.0-92.0
18852/92	92	116	92.0-100.0
18852/100	100	116	100.0-108.0
18852/108	108	116	108.0-116.0
18852/116	116	116	116.0-126.0
18852/126	126	116	126.0-136.0
18852/136	136	116	136.0-146.0
18852/146	146	116	146.0-156.0
18852/156	156	116	156.0-166.0
18852/166	166	116	166.0-178.0
18852/178	178	116	178.0-190.0
18852/190	190	116	190.0-202.0



### KING CRIMPER 2000

THE KING OF CRIMPERS

The King Crimper's extremely large opening and enormous crimping force coupled with the world's most advanced crimping control means there are literally no limitations to what it can crimp. The King Crimper's robust frame design ensures consistent repeatability. The ICC Control on a swing arm and remote control device allows the operator to crimp hard to crimp objects and while keeping them safe and in control of the process. The primary markets for 'the King' are oil & gas and transportation for crimping pipes, tubes and fittings.

TECHNICAL DATA	
Max crimping dia (mm/inch) 1)	640/25.20
Max crimping dia with master dies (mm/inch)	650/25.6
Max. crimping force (kN)	20 000
Max. crimping force (tonnage)	2 000
Cycle time 10 mm (s) 2)	7.7
Hydraulic hose size (inch)	16 *
Industrial hose size (inch)	25.20 *
Die set series 3)	1605/170
Max. opening (mm) 4)	+180
Max. opening without dies (mm)	820
Master die D/L (mm)	640/300
Master die D/L (inch)	25.20/11.8
Motor Power (kW/HP)	11/15
Oil tank volume	250 I
DIMENSIONS (LxWxH)	
Machine (mm)	3380x1345x2361
	1105 705 1111

Machine (mm)	3380x1345x2361
Hydraulic Unit (mm)	1195x705x1411
Machine (inch)	113.0x52.9x92.9
Hydraulic Unit (inch)	47.0x27.8x44.9

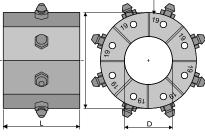
#### WEIGHT (KG/LBS)

Machine	15 500/32628
Hydraulic Unit	305/772

**ACCORDING TO THE FITTING.** 



Remote control unit as a standard feature



- 1) With standard dies. Crimping range can be increased with special dies.
  Theoretical with 10 mm cycle.
- See table for die set data.

  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place. With adapter dies.

ABSOLUTE QUALITY ⁄IADE IN ÆINLAND

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Foot pedal (part no 691563) Adapter dies for 170-series die sets, L300 (part no 705485)

Auto greasing G3 Remote control unit R1

Pressure crimping ICC1

Step crimping ICC2 Quality control ICC3

Graphical quality control ICC4

Interface pack ETH (Communication TCP/IP & UDP)

Camera with 7" display Bar Code Reader BCR

#### **OPTIONS**

Oil Condition Monitoring OCM

Adapter dies for 160-series die sets, L220 (part no 404916) Oil cooler J3





Camera with display as a standard feature.

#### **DIE SET 170-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
405060/205	205	220	205.0-220.0
405060/220	220	220	220.0-235.0
405060/235	235	220	235.0-250.0
405060/250	250	220	250.0-270.0
405060/270	270	220	270.0-290.0
405060/290	290	220	290.0-320.0

#### **DIE SET 160-SERIES**

ı	DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
ı	18852/84	84	116	84.0-92.0
ı	18852/92	92	116	92.0-100.0
1	18852/100	100	116	100.0-108.0
ı	18852/108	108	116	108.0-116.0
ı	18852/116	116	116	116.0-126.0
ı	18852/126	126	116	126.0-136.0
ı	18852/136	136	116	136.0-146.0
ı	18852/146	146	116	146.0-156.0
ı	18852/156	156	116	156.0-166.0
ı	18852/166	166	116	166.0-178.0
ı	18852/178	178	116	178.0-190.0
1	18852/190	190	116	190.0-202.0





# **NUT & CABLE**

Nut and cable crimping machines are popular for automated production lines due to constant center line and flexible layouts. These are fast and accurate machines for short crimp length and low tonnage serial production.

### **CC COMPARISON**



TECHNICAL DATA	CC22	CC26
Max crimping dia (mm) 1)	54	61
Max crimping dia (inch) 1)	2.12	2.40
Max crimping force (kN)	680	1300
Max crimping force (tonnage)	68	130
Cycle time 10 mm (s) 2)	1.8	2.8
Industrial hose size (mm/inch)	54/2.12 *	61/2.40 *
Die set series	CC22	20
Max opening (mm) 3)	+25	+30
Max opening without dies (mm)	109	114
Master die D/L (mm)	84/52	84/80
Master die D/L (inch)	3.31/2.05	3.31/3.15
Motor Power (kW/HP)	3/4.0	4/5.5
Oil tank volume	35 I / 32 I (Z-model)	35 I / 32 I (Z-model)
DIMENSIONS (LxWxH)		
Machine (mm)	647x479x735	647x588x745
Machine (inch)	25.4x18.8x28.9	23.6x23.1x29.3
Crimping head (mm) Z-model	559x572.5x383	617x608x383
Hydraulic unit (mm) Z-model	597x489x653	597x489x653
Crimping head (inch) Z-model	22x22.5x15	24.3x23.9x15.1
Hydraulic unit (inch) Z-model	23.5x19.2x25.7	235.5x19.3x25.7
WEIGHT (KG/LBS)		
	130/286	185/407
	140/308 (CC22Z)	210/462

#### \* ACCORDING TO THE FITTING.

- With standard dies. Crimping range can be increased with special dies. Theoretical with 10 mm cycle.

  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.



### **NC COMPARISON**





TECHNICAL DATA	NC20	NC30	NC40	NC60
Crimping range (mm) 1)	12-49	12-63	12-105	12-160
Crimping range (inch) 1)	0.47-1.93	0.47-2.48	0.47-4.13	0.47-6.30
Max. crimping force (kN)	500	660	930	1300
Max. crimping force (tonnage)	50	66	93	130
Cycle time 10 mm (s) 2)	1.5	1.4	1.9	2.8
Hose size ID (inch)	1 1/4	2	2	3
Die set series	NC20	NC30	NC20/30/40	NC20/30/40/60
Max. opening (mm) 3)	+18	+26	+26	+29
Max. opening without dies (mm)	117	125	166	249
Master die D/L (mm)	99/22	99/35	140/37	220/57
Master die D/L (inch)	3.90/0.87	3.90/1.38	3.90/1.46	8.66/2.24
Motor Power (kW/HP)	3.0/4.0	4.0/5.5	4.0/5.5	4.0/5.5
Oil tank volume	50 I	50 I	50 I	50
Z-model availability	YES	YES	YES	YES

DIMENSIONS (LxWxH)	NC20	NC30	NC40	NC60
Standard (mm)	835x885x997	835x885x997	835x885x997	835x1015x997
Standard (inch)	32.9x34.8x39.3	32.9x34.8x39.3	32.9x34.8x39.3	32.9x39.9x39.3
Z-model head (mm)	321x340x395	406x359x395	406x372x395	859x490x653
Z-model hydraulic unit (mm)	597x436,5x651	597x436.5x651	653x473x711	660x473x713
Z-model head (inch)	12.6x13.4x17.2	15.9x14.1x15.6	15.9x14.6x15.6	33.8x19.3x25.7
Z-model hydraulic unit (inch)	25.6x17.2x23.5	25.6x17.2x23.5	25.7x18.6x27.9	26x18.6x28.1
WEIGHT (KG/LBS)	NC20	NC30	NC40	NC60
Standard	287/485	288/529	288/529	536/1179
Z-model head	113/249	129/284	129/284	470/1034
Z-model hydraulic unit	103/227	101/222	96/211	105/231

With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle.

Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.



ABSOLUTE QUALITY /IADE IN /FINLAND





Z-model

#### RELIABLE SOLUTION FOR AUTOMATED LINES

CC22 comes in both a table-top or ergonomic Z-configuration. The CC22 is built for Serial Production use. By design, the constant centerline crimping enables easy part-positioning.

The Z-configuration, with the crimping head and hydraulic unit all separate, makes the CC22 ideal for automatic line use. For automation it can be equipped with an optional Automatic Greasing Unit, enabling an interruption-free operation combined with long maintenance intervals and ensuring ultimate accuracy.

TECHNICAL DATA	
Max crimping dia (mm) 1)	54
Max crimping dia (inch) 1)	2.12
Max crimping force (kN)	680
Max crimping force (tonnage)	68
Cycle time 10 mm (s) 2)	1.8
Industrial hose size (mm/inch)	54/2.12 *
Die set series	CC22
Max opening (mm) 3)	+25
Max opening without dies (mm)	109
Master die D/L (mm)	84/52
Master die D/L (inch)	3.31/2.05
Motor Power (kW/HP)	3/4.0
Oil tank volume	35 I / 32 I (Z-model)
DIMENSIONS (LxWxH)	
Machine (mm) CC22	647x479x735
Machine (inch) CC22	25.4x18.8x28.9
Crimping head (mm) CC22Z	559x572.5x383
Hydraulic unit (mm) CC22Z	597x489x653
Crimping head (inch) CC22Z	22x22.5x15
Hydraulic unit (inch) CC22Z	23.5x19.2x25.7
WEIGHT (KG/LBS)	
CC22	130/286

140/308

D-marking

O-marking

O-marking

O-marking

O-marking

O-marking

With standard dies. Crimping range can be increased with special dies.
 Theoretical with 10 mm cycle.

3) Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC

#### MODELS

Standard Z-model

#### STANDARD FEATURES

Electric backstop device (part no 691562)
Pressure crimping ICC1

#### OPTIONS

Step crimping ICC2

QuickChange-tool (part no 691043)

Foot pedal (part no 691563)

Tool table with QuickChange-tool (part no 714065) Mechanical back stop device (part no 691562/P51MS)

Quality control ICC3

Graphical quality control ICC4

Auto greasing G3

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Bar Code Reader BCR



#### DIE SET CC22

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18315/10	10	50	10.0-12.0
18315/12	12	50	12.0-14.0
18315/14	14	50	14.0-16.0
18315/16	16	50	16.0-19.0
18315/19	19	50	19.0-23.0
18315/23	23	50	23.0-27.0
18315/27	27	50	27.0-31.0
18315/31	31	50	31.0-36.0
18315/36	36	50	36.0-41.0
18315/41	41	50	41.0-47.0
18315/47	47	50	47.0-54.0

In addition to the standard die sets, a wide range of special die sets is available on request.

CC22Z

\* ACCORDING TO THE FITTING.





#### RELIABLE SOLUTION FOR AUTOMATED LINES

CC26 comes in both a table-top or ergonomic Z-configuration. The CC26 is built for high-volume Serial Production use. By design, the constant centerline crimping enables easy part-positioning.

The Z-configuration, with the crimping head and hydraulic unit all separate, makes the CC26 ideal for automatic line use. For automation it can be equipped with an optional Automatic Greasing Unit, enabling an interruption-free operation combined with long maintenance intervals and ensuring ultimate accuracy. It also has wiper seal, protecting dirt and debris from entering the cylinder.

TECHNICAL DATA	
Max crimping dia (mm) 1)	61
Max crimping dia (inch) 1)	2.40
Max crimping force (kN)	1300
Max crimping force (tonnage)	130
Cycle time 10 mm (s) 2)	2.8
Hydraulic hose size (inch)	1 1/4 *
Industrial hose size (mm/inch)	61 /2.40 *
Die set series	20
Max opening (mm) 3)	+30
Max opening without dies (mm)	114
Master die D/L (mm)	84/80
Master die D/L (inch)	3.31/3.15
Motor Power (kW/HP)	4/5.5
Oil tank volume	35 I / 32 I (Z-model)
DIMENSIONS (LxWxH)	
Machine (mm) CC26	647x588x745
Machine (inch) CC26	23.6x23.1x29.3
Crimping head (mm) CC26Z	617x608x383
Hydraulic unit (mm) CC26Z	597x489x653
0: :	04.0.00.0.45.4

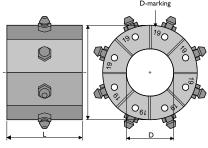
DIMENSIONS (EXVXII)	
Machine (mm) CC26	647x588x745
Machine (inch) CC26	23.6x23.1x29.3
Crimping head (mm) CC26Z	617x608x383
Hydraulic unit (mm) CC26Z	597x489x653
Crimping head (inch) CC26Z	24.3x23.9x15.1
Hydraulic unit (inch) CC26Z	235.5x19.3x25.7
WEIGHT (KG/LBS)	

#### 185/407 210/462 (Z-model)

**ACCORDING TO THE FITTING.** 







- With standard dies. Crimping range can be increased with special dies.
  Theoretical with 10 mm cycle.
  Maximum opening is the total die travel. Add
- this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC

#### **MODELS**

Standard

#### STANDARD FEATURES

Electric backstop device (part no 691562) Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

QuickChange-tool (part no 691043) Foot pedal (part no 691563)

Tool table with QuickChange-tool (part no 714065) Mechanical back stop device (part no 691562/P51MS)

Quality control ICC3 Graphical quality control ICC4

Auto greasing G3

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Bar Code Reader BCR



#### **DIE SET 20-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18013/10	10	55	10.0-12.0
18013/12	12	55	12.0-14.0
18013/14	14	55	14.0-16.0
18013/16	16	55	16.0-19.0
18013/19	19	55	19.0-23.0
18013/23	23	55	23.0-27.0
18013/27	27	70	27.0-31.0
18013/31	31	70	31.0-36.0
18013/36	36	75	36.0-41.0
18013/41	41	75	41.0-47.0
18013/47	47	85	47.0-54.0
18013/54	54	85	54.0-61.0







Finn-Power NC-machines have proven to be the most reliable and widely used nut crimping machines in the industry. NC-machines provide fast and accurate crimping for fitting manufacturing.

NC2O can be used also for other applications with short crimping length eg. connectors, small hoses, rings, tubes and sensors.

Adjustable back stop enables quick set up for different products. A special centering pin, selected according to ferrule size, can be used during the crimping.

Also available as Z-model with separate crimping head and hydraulic unit.

TECHNICAL DATA	
Crimping range (mm) 1)	12-49
Crimping range (inch) 1)	0.47-1.93
Max. crimping force (kN)	500
Max. crimping force (tonnage)	50
Cycle time 10 mm (s) 2)	1.5
Hose size ID (inch)	1 1/4
Die set series	NC20
Max. opening (mm) 3)	+18
Max. opening without dies (mm)	117
Master die D/L (mm)	99/22
Master die D/L (inch)	3.90/0.87
Motor Power (kW/HP)	3.0/4.0
Oil tank volume	50 I
Z-model availability	YES

Standard (mm)	835x885x997
Standard (inch)	32.9x34.8x39.3
Z-model head (mm)	321x340x395
Z-model hydraulic unit (mm)	597x436,5x651
Z-model head (inch)	12.6x13.4x17.2
Z-model hydraulic unit (inch)	25.6x17.2x23.5
WEIGHT (KG/LBS)	
Standard	287/485
Z-model head	113/249
Z-model hydraulic unit	103/227

 Ineoretical with 10mm cycle.
 Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

# ABSOLUTE QUALITY HADE IN FINLAND

FOTANDARD FEATURES Foot pedal (Standard) Mechanical back stop device Pressure crimping ICC1 Step crimping ICC2  DPTIONS Foot pedal (Z-model) (part no 691563 Auto greasing G3 Dil Condition Monitoring OCM Quality control ICC3 Graphical quality control ICC4 Remote control unit R2 (double hand Interface pack ETH (Communication A3 signal Bar Code Reader BCR	
Mechanical back stop device Pressure crimping ICC1 Step crimping ICC2  DPTIONS Foot pedal (Z-model) (part no 691563 Auto greasing G3 Dil Condition Monitoring OCM Quality control ICC3 Graphical quality control ICC4 Remote control unit R2 (double hand interface pack ETH (Communication) A3 signal	
Pressure crimping ICC1 Step crimping ICC2  DPTIONS  Foot pedal (Z-model) (part no 691563 Auto greasing G3 Dil Condition Monitoring OCM Quality control ICC3 Graphical quality control ICC4 Remote control unit R2 (double hand interface pack ETH (Communication)	
Step crimping ICC2  DPTIONS  Foot pedal (Z-model) (part no 691563 Auto greasing G3 Dil Condition Monitoring OCM Quality control ICC3 Graphical quality control ICC4 Remote control unit R2 (double hand Interface pack ETH (Communication)	
Foot pedal (Z-model) (part no 691563 Auto greasing G3 Dil Condition Monitoring OCM Quality control ICC3 Graphical quality control ICC4 Remote control unit R2 (double hand Interface pack ETH (Communication	
Auto greasing G3 Dil Condition Monitoring OCM Quality control ICC3 Graphical quality control ICC4 Gemote control unit R2 (double hand Interface pack ETH (Communication A3 signal	
Dil Condition Monitoring OCM Quality control ICC3 Graphical quality control ICC4 Remote control unit R2 (double hand interface pack ETH (Communication A3 signal	
Quality control ICC3 Graphical quality control ICC4 Remote control unit R2 (double hand interface pack ETH (Communication in its signal)	
Graphical quality control ICC4 Remote control unit R2 (double hand Interface pack ETH (Communication N3 signal	
Remote control unit R2 (double hand nterface pack ETH (Communication A3 signal	
A3 signal	TCP/IP & UDP)
-	
Bar Code Reader BCR	
Contract of the second	
-3	100

DIL SET NOZU-SENIES				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18546/12	12	3	12.0-16.0	
18546/16	16	4	16.0-22.0	
18546/22	22	4.5	22.0-27.0	
18546/27	27	5	27.0-34.0	
18546/34	34	5	34.0-41.0	
105/6//1	41		41 0 40 0	





Finn-Power NC-machines have proven to be the most reliable and widely used nut crimping machines in the industry. NC-machines provide fast and accurate crimping for fitting manufacturing.

NC30 is equiped with longer master dies and has bit more opening and force than NC20. NC30 can be used also for other applications with short crimping length eg. connectors, small hoses, rings, tubes and sensors.

Adjustable back stop enables quick set up for different products. A special centering pin, selected according to ferrule size, can be used during the crimping.

Also available as Z-model with separate crimping head and hydraulic unit.

TECHNICAL DATA	
Crimping range (mm) 1)	12-63
Crimping range (inch) 1)	0.47-2.48
Max. crimping force (kN)	660
Max. crimping force (tonnage)	66
Cycle time 10 mm (s) 2)	1.4
Hose size ID (inch)	2
Die set series	NC30
Max. opening (mm) 3)	+26
Max. opening without dies (mm)	125
Master die D/L (mm)	99/35
Master die D/L (inch)	3.90/1.38
Motor Power (kW/HP)	4.0/5.5
Oil tank volume	50 I
Z-model availability	YES

DIMENSIONS (LxWxH)		
BINIENSIGNS (EXVIXIT)		
Standard (mm)	835x885x997	
Standard (inch)	32.9x34.8x39.3	
Z-model head (mm)	406x359x395	
Z-model hydraulic unit (mm)	597x436.5x651	
Z-model head (inch)	15.9x14.1x15.6	
Z-model hydraulic unit (inch)	25.6x17.2x23.5	
WEIGHT (KG/LBS)		
Standard	288/529	
Z-model head	129/284	
Z-model hydraulic unit	101/222	
) With standard dies. Crimping increased with special dies.	range can be	

- Theoretical with 10mm cycle.

  Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.



#### CONTROL

ICC (7" touchscreen)

#### **STANDARD FEATURES**

Foot pedal (Standard) Mechanical back stop device Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Foot pedal (Z-model) (part no 691563) Auto greasing G3 Oil Condition Monitoring OCM Quality control ICC3

Graphical quality control ICC4 Remote control unit R2 (double hand)

Interface pack ETH (Communication TCP/IP & UDP) A3 signal

Bar Code Reader BCR









DIE SET NC30-SERIES				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
702044/12	12	3	12.0-14.0	
702044/14	14	3	14.0-16.0	
702044/16	16	4	16.0-19.0	
702044/19	19	4	19.0-22.0	
702044/22	22	4.5	22.0-26.0	
702044/26	26	4.5	26.0-30.0	
702044/30	30	5	30.0-34.0	
702044/34	34	5	34.0-39.0	
702044/39	39	5	39.0-45.0	
702044/45	45	5	45.0-51.0	
702044/51	51	5	51.0-57.0	
702044/57	57	5	57.0-63.0	
In addition to the standard die sets, a wide range of special die sets is available on request.				





Finn-Power NC-machines have proven to be the most reliable and widely used nut crimping machines in the industry. NC-machines provide fast and accurate crimping for fitting manufacturing.

With 93 ton force and 140mm master dies NC40 is the second biggest NC-machine in the range. NC40 can be used also for other applications with short crimping length eg. connectors, small hoses, rings, tubes and sensors.

Adjustable back stop enables quick set up for different products. A special centering pin, selected according to ferrule size, can be used during the crimping.

Also available as Z-model with separate crimping head and hydraulic unit.

TECHNICAL DATA	
Crimping range (mm) 1)	12-105
Crimping range (inch) 1)	0.47-4.13
Max. crimping force (kN)	930
Max. crimping force (tonnage)	93
Cycle time 10 mm (s) 2)	1.9
Hose size ID (inch)	2
Die set series	NC20/30/40
Max. opening (mm) 3)	+26
Max. opening without dies (mm)	166
Master die D/L (mm)	140/37
Master die D/L (inch)	3.90/1.46
Motor Power (kW/HP)	4.0/5.5
Oil tank volume	50 I
Z-model availability	YES

DIMENSIONS (LxWxH)	
Standard (mm)	835x885x997
Standard (inch)	32.9x34.8x39.3
Z-model head (mm)	406x372x395
Z-model hydraulic unit (mm)	653x473x711
Z-model head (inch)	15.9x14.6x15.6
Z-model hydraulic unit (inch)	25.7x18.6x27.9
WEIGHT (KG/LBS)	
Standard	288/529
Z-model head	129/284
Z-model hydraulic unit	96/211

1) With standard dies. Crimping range can be increased with special dies. Theoretical with 10mm cycle.

Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Foot pedal (Standard) Mechanical back stop device

Pressure crimping ICC1 Step crimping ICC2

#### **OPTIONS**

Adapter dies for NC20-series (part no 702079)

Adapter dies for NC30-series (part no 702758) Foot pedal (Z-model) (part no 691563)

Auto greasing G3

Oil Condition Monitoring OCM

Quality control ICC3

Graphical quality control ICC4

Remote control unit R2 (double hand)

Interface pack ETH (Communication TCP/IP & UDP) A3 signal

Bar Code Reader BCR





DIE SET NC20-SERIES			
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
18546/12	12	3	12.0-16.0
18546/16	16	4	16.0-22.0
18546/22	22	4.5	22.0-27.0
18546/27	27	5	27.0-34.0
18546/34	34	5	34.0-41.0
18546/41	41	5	41.0-49.0

DIE SET NC30-SERIES				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
702044/12	12	3	12.0-14.0	
702044/14	14	3	14.0-16.0	
702044/16	16	4	16.0-19.0	
702044/19	19	4	19.0-22.0	
702044/22	22	4.5	22.0-26.0	
702044/26	26	4.5	26.0-30.0	
702044/30	30	5	30.0-34.0	
702044/34	34	5	34.0-39.0	
702044/39	39	5	39.0-45.0	
702044/45	45	5	45.0-51.0	
702044/51	51	5	51.0-57.0	
702044/57	57	5	57.0-63.0	

DIE SET NC40-SERIES					
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)		
703955/63	63	5	63.0-69.0		
703955/69	69	5	69.2-73.0		
703955/73	73	6	73.0-81.0		
703955/81	81	7	81.0-93.0		
703955/93	93	7	93.0-105.0		
In addition to the standard die sets, a wide range of special die sets is available on request.					





### NC60

Finn-Power NC-machines have proven to be the most reliable and widely used nut crimping machines in the industry. NC-machines provide fast and accurate crimping for fitting manufacturing.

NC60 is the biggest and strongest machine in Nut Crimping series. Due to large 160 mm master dies NC60 is ideal also for larger ring crimping and other applications requiring bigger dimensions.

Adjustable back stop enables quick set up for different products. A special centering pin, selected according to ferrule size, can be used during the crimping.

TECHNICAL DATA	
Crimping range (mm) 1)	12-160
Crimping range (inch) 1)	0.47-6.30
Max. crimping force (kN)	1300
Max. crimping force (tonnage)	130
Cycle time 10 mm (s) (2	2.8
Hose size ID (inch)	3
Die set series	NC20/30/40/60
Max. opening (mm) 3)	+29
Max. opening without dies (mm)	249
Master die D/L (mm)	220/57
Master die D/L (inch)	8.66/2.24
Motor Power (kW/HP)	4.0/5.5
Oil tank volume	50 I

DIMENSIONS (LxWxH)				
Standard (mm)	835x1015x997			
Standard (inch)	32.9x39.9x39.3			
Z-model head (mm)	859x490x653			
Z-model hydraulic unit (mm)	660x473x713			
Z-model head (inch)	33.8x19.3x25.7			
Z-model hydraulic unit (inch)	26x18.6x28.1			
WEIGHT (KG/LBS)				
Standard	536/1179			
Z-model head	470/1034			
Z-model hydraulic unit	105/231			
With standard dies. Crimping range can be increased with special dies.				

Theoretical with 10mm cycle.

Maximum opening is the total die travel. Add this value to the minimum crimping diameter of the die set used. The result is the maximum opening of the machine with die set in place.

#### CONTROL

ICC (7" touchscreen)

#### STANDARD FEATURES

Foot pedal (Standard) Mechanical back stop device Pressure crimping ICC1 Step crimping ICC2

Adapter dies for NC40-series (part no 708884)

#### **OPTIONS**

Adapter dies for NC20-series (part no 702079) Adapter dies for NC30-series (part no 702758) Foot pedal (Z-model) (part no 691563)

Auto greasing G3

Oil Condition Monitoring OCM

Quality control ICC3

Graphical quality control ICC4 Remote control unit R2 (double hand)

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Bar Code Reader BCR



#### **DIE SET NC20-SERIES**

L	DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
П	18546/12	12	3	12.0-16.0
ı	18546/16	16	4	16.0-22.0
ı	18546/22	22	4.5	22.0-27.0
ı	18546/27	27	5	27.0-34.0
П	18546/34	34	5	34.0-41.0
	18546/41	41	5	41.0-49.0

#### **DIE SET NC30-SERIES**

DieSetNo	D (mm)	L (mm)	Crimp. range (mm)
702044/12	12	3	12.0-14.0
702044/14	14	3	14.0-16.0
702044/16	16	4	16.0-19.0
702044/19	19	4	19.0-22.0
702044/22	22	4.5	22.0-26.0
702044/26	26	4.5	26.0-30.0
702044/30	30	5	30.0-34.0
702044/34	34	5	34.0-39.0
702044/39	39	5	39.0-45.0
702044/45	45	5	45.0-51.0
702044/51	51	5	51.0-57.0
702044/57	57	5	57.0-63.0

#### DIE SET NC40-SERIES

D (mm)	L (mm)	Crimp. range (mm)
63	5	63.0-69.0
69	5	69.2-73.0
73	6	73.0-81.0
81	7	81.0-93.0
93	7	93.0-105.0
	63 69 73 81	63 5 69 5 73 6 81 7

#### **DIE SET NC60-SERIES**

D (mm)	L (mm)	Crimp. range (mm)
100	8	100.0-108.0
108	8	108.0-116.0
116	9	116.0-126.0
126	9	126.0-136.0
136	10	136.0-146.0
146	10	146.0-156.0
	100 108 116 126 136	100 8 108 8 116 9 126 9 136 10

In addition to the standard die sets, a wide range of special die sets is available on request.





## CUTTING

Safety has been the key driver in cutting machine development. Both serial production cutting machines are available with safety door and electric brake. Semi-automatic QT-model is the solution for very accurate cutting length.

### **CM COMPARISON**



TECHNICAL DATA	CM30	CM35	CM75	CM91
Max. hose size (inch) 1)	2/11/4	2 / 1 1/4	2	3
Diameter (blade) external (mm)	300x3	300x3	520x4	650x4
Diameter (blade) internal (mm)	30	30	38	42
Max. hose OD (mm)	70	70	71	120
Exhaust outlet OD (mm)	60	60	103	125
Motor Power (kW) 2)	3.0/2.2	3.0/2.2	7.5 / 10.0	11.0
Motor Power (HP) 2)	4.0/2.9	4.0/2.9	10.0	15.0
Velocity, 50Hz (rpm)	2750	2750	2840	2900
Velocity, 60Hz (rpm)	3370	3370	2840	3480
DIMENSIONS (LxWxH)				
mm	600x503x739	712x562x1127	990x714x1318	1400x967x1614
inch	23.6x19.8x29.1	28.0x22.1x44.4	39.0x28.2x51.9	55.1x38x63.5
WEIGHT				
kg/lbs	42/92.4	74/162.8	300/485	275/605

Hydraulic hose, 1-2 wire / 4 wire
 3-phase / 1-phase





CM30 is designed for workshop use. CM30 is manually operated and easy to use and it comes with a fume exhaust connection.

3-phase and 1-phase electric configurations available. Please also see product cards for other CM30/35 configurations.

TECHNICAL DATA	
Max. hose size (inch) 1)	2 / 1 1/4
Diameter (blade) external (mm)	300x3
Diameter (blade) internal (mm)	30
Max. hose OD (mm)	70
Exhaust outlet OD (mm)	60
Motor Power (kW) 2)	3.0/2.2
Motor Power (HP) 2)	4.0/2.9
Velocity, 50Hz (rpm)	2750
Velocity, 60Hz (rpm)	3370
DIMENSIONS (LxWxH)	
mm	600x503x739
inch	23.6x19.8x29.1
WEIGHT	
kg/lbs	42/92.4

#### **MOTOR BRAKE**

CM30B is equipped with mechanical brake for faster stopping of blade rotation.

#### **PNEUMATIC PUSHER**

CM30P is equipped with pneumatically operated hose pusher.

I)	Hydraulic hose, 1-2 wire / 4 wire
2)	3-phase / 1-phase

ABSOLUTE/
QUALITY/
MADE IN
MADE IN FINLAND

MODELS	
Standard	
CM30B	
CM30P	
STANDARD FEATUR	ES
Toothed blade (part no 12297)	)
OPTIONS	
Smooth blade (part no 12319)	
Toothed blade as a standard feature.	Smooth blade as an option.





CM30CS is designed for service van use. CM30CS is manually operated and easy to use and it comes with a fume exhaust connection.

12 or 24V operated versions available.

Please also see product cards for other CM30/35 configurations.

TECHNICAL DATA	
Max. hose size (inch) 1)	2 / 1 1/4
Diameter (blade) external (mm)	300x3
Diameter (blade) internal (mm)	30
Max. hose OD (mm)	70
Exhaust outlet OD (mm)	60
Motor Power (kW) 2)	2.2 / 1.5
Motor Power (HP) 2)	3.0 / 2.0
Velocity, 12VDC (rpm)	3000
Velocity, 24VDC (rpm)	2800
DIMENSIONS (LxWxH)	
mm	600x503x739
inch	23.6x19.8x29.1
WEIGHT	
kg/lbs	37/81,4

Hydraulic hose, 1-2 wire / 4 wire
 12V / 24V. Overload controlled.

ADCOLUTE/
ABSOLUTF QUALITY
AADE IN FINLAND

STANDARD FEATUR	RES
Toothed blade (part no 12297	
OPTIONS	
Smooth blade (part no 12319	)
10	
	1
WAS COMPETE	NN POWER
Toothed blade	
	Smooth blade





### **CM35**

CM35 is designed for workshop use. CM35 capacity is same as in CM30 but it comes with manual foot pedal. CM35 is easy to use and it comes with a fume exhaust connection.

3-phase and 1-phase electric configurations available. Please also see product cards for other CM30/35 configurations.

TECHNICAL DATA	
Max. hose size (inch) 1)	2 / 1 1/4
Diameter (blade) external (mm)	300x3
Diameter (blade) internal (mm)	30
Max. hose OD (mm)	70
Exhaust outlet OD (mm)	60
Motor Power (kW) 2)	3.0/2.2
Motor Power (HP) 2)	4.0/2.9
Velocity, 50Hz (rpm)	2750
Velocity, 60Hz (rpm)	3370
DIMENSIONS (LxWxH)	
mm	712x562x1127
inch	28.0x22.1x44.4
WEIGHT	
kg/lbs	74/162.8

- Hydraulic hose, 1-2 wire / 4 wire
   3-phase / 1-phase



OTANDADD SEATUD	F0
STANDARD FEATUR Toothed blade (part no 12297	
Foot pedal	,
OPTIONS	
Smooth blade (part no 12319)	
10000	100000000000000000000000000000000000000
- I	
N BEGIN	THE POWER
NO OW	N. DWER
Toothed blade as a standard feature.	Smooth blade
as a standard feature.	as an option.





**CM75** 

Finn-Power CM75 hose-cutting machine has been designed to cut up to 2" diameter 6-spiral hoses. The hose is pushed against the blade by a pneumatic pusher.

Pusher movement speed can be quickly and easily adjusted to choose optimal cutting speed for every hose. The blade can be sharpened when necessary. The cutter has a built-in bin for collecting cutting waste.

SAFE- and QT-models also available.

TECHNICAL DATA	
Max. hose size (inch)	2
Diameter (blade) external (mm)	520x4
Diameter (blade) internal (mm)	38
Max. hose OD (mm)	71
Exhaust outlet OD (mm)	103
Motor Power (kW/HP)	7.5 / 10.0
Velocity, 50Hz (rpm)	2840
Velocity, 60Hz (rpm)	2840
DIMENSIONS (LxWxH)	
mm	990x714x1318
inch	39.0x28.2x51.9
WEIGHT	
kg/lbs	300/485

ABSOLUTE QUALITY AADE IN FINLAND

STANDARD FEATURES

Toothed blade (part no 12251)
Foot pedal (part no 701405)
Adjustable pneumatic pusher speed
Adjustable hose support
OPTIONS
Measuring table (2 m segments) (part no 692091)
Fume extractor (part no 691992)
Smooth blade (part no 055201)
Measuring table (left/right handed)
as an option.





### CM75 SAFE

Finn-Power CM75 SAFE has the same capacity as in CM75 with added safeguard and motor brake. Safeguard opens only after blade rotation has stopped.

Service free electrical brake stops the blade in only 3 seconds.

Pusher movement speed can be quickly and easily adjust optimal cutting speed for every hose. The blade can be s necessary. The cutter has a built-in bin for collecting cuti

See also QT-model.

TECHNICAL DATA	
Max. hose size (inch)	2
Diameter (blade) external (mm)	520x4
Diameter (blade) internal (mm)	38
Max. hose OD (mm)	71
Exhaust outlet OD (mm)	103
Motor Power (kW/HP)	7.5 / 10.0
Velocity, 50Hz (rpm)	2840
Velocity, 60Hz (rpm)	2840
DIMENSIONS (LxWxH)	
mm	990x890x1318
inch	39x35x51.9
WEIGHT	
kg/lbs	340/748



sted to choose	STANDARD FEATURES
	Toothed blade (part no 12251)
sharpened when	Foot pedal Adjustable pneumatic pusher speed
tting waste.	Adjustable prieumatic pusher speed  Adjustable hose support
	Safeguard
	Motor brake
	OPTIONS
	Measuring table (2 m segments) (part no 692091)
	Fume extractor (part no 691992) Smooth blade (part no 055201)
	Smooth blade (part no 033201)
1	
	7
-	Measuring table (left/right handed) as an option.





Fast measuring reduces the cutting cycle time dramatically and enables fast return on investment.

CM75QT is equipped with touch-control which enables connectivity and job queues.

CM75QT is also available as SAFE-model.

TECHNICAL DATA	
Max. hose size (inch)	2
Diameter (blade) external (mm)	520x4
Diameter (blade) internal (mm)	38
Max. hose OD (mm)	71
Exhaust outlet OD (mm)	103
Motor Power (kW/HP)	7.5 / 10.0
Velocity, 50Hz (rpm)	2840
Velocity, 60Hz (rpm)	2840
DIMENSIONS (LxWxH) with 6	Sm table
mm	7134x1080x1330
inch	280.8x42.5x52.3
WEIGHT with 6m table	
kg/lbs	920/2024



Toothed blade as a standard feature.



Smooth blade as an option.

ABSOLUTE QUALITY AADE IN FINLAND

STANDARD FEATURES
<b>-</b> .

Touchscreen
Toothed blade (part no 12251)
Foot pedal
Adjustable pneumatic pusher speed
Adjustable hose support
Measuring table (6 metre)

#### **OPTIONS**

Measuring table (2 m segments) (part no 692091)
Fume extractor (part no 691992)
Smooth blade (part no 055201)
Safeguard (SAFE-model)
Motor brake (SAFE-model)





**CM91** 

Finn-Power CM91 hose-cutting machine has been designed to cut up to 3" hoses.

The hose is pushed against the blade by a electrical pusher.

Electrical pusher movement adjusts pusher speed automatically providing optimal cutting speed for every hose and preventing blade overheating.

The blade can be sharpened when necessary. The cutter has a built-in bin for collecting cutting waste.

SAFE-model also available.

TECHNICAL DATA	
Max. hose size (inch)	3
Diameter (blade) external (mm)	650x4
Diameter (blade) internal (mm)	42
Max. hose OD (mm)	120
Exhaust outlet OD (mm)	125
Motor Power (kW/HP)	11.0 / 15.0
Velocity, 50Hz (rpm)	2900
Velocity, 60Hz (rpm)	3480
DIMENSIONS (LxWxH)	
mm	1400x967x1614
inch	55.1x38x63.5
WEIGHT	
kg/lbs	275/605



Toothed blade as a standard feature.



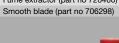
Smooth blade as an option.

### STANDARD FEATURES

Touchscreen Toothed blade (part no 705179) Foot pedal Adjustable electric pusher speed Adjustable hose support Mechanical safeguard

#### **OPTIONS**

Measuring table (1,5 m segments) (part no 705605) Fume extractor (part no 720460)





Touchscreen as standard feature





Finn-Power CM91 SAFE has the same capacity as in CM91 with added electric safeguard and motor brake. Safeguard opens only after blade rotation has stopped.

Service free electrical brake stops the blade in only 3 seconds.

Electrical pusher movement adjusts pusher speed automatically providing optimal cutting speed for every hose and preventing blade overheating.

The blade can be sharpened when necessary.

The cutter has a built-in bin for collecting cutting waste.

TECHNICAL DATA	
Max. hose size (inch)	3
Diameter (blade) external (mm)	650x4
Diameter (blade) internal (mm)	42
Max. hose OD (mm)	120
Exhaust outlet OD (mm)	125
Motor Power (kW/HP)	11.0 / 15.0
Velocity, 50Hz (rpm)	2900
Velocity, 60Hz (rpm)	3480
DIMENSIONS (LxWxH)	
mm	1400x970x1614
inch	55.1x38.2x63.5
WEIGHT	
kg/lbs	360/792



Toothed blade as a standard feature.



Smooth blade as an option.

ABSOLUTE QUALITY /ADE IN

STAN	IDARD	FEATU	RES

Touchscreen
Toothed blade (part no 705179)
Foot pedal
Adjustable electric pusher speed
Adjustable hose support
Safeguard
Motor brake *

#### **OPTIONS**

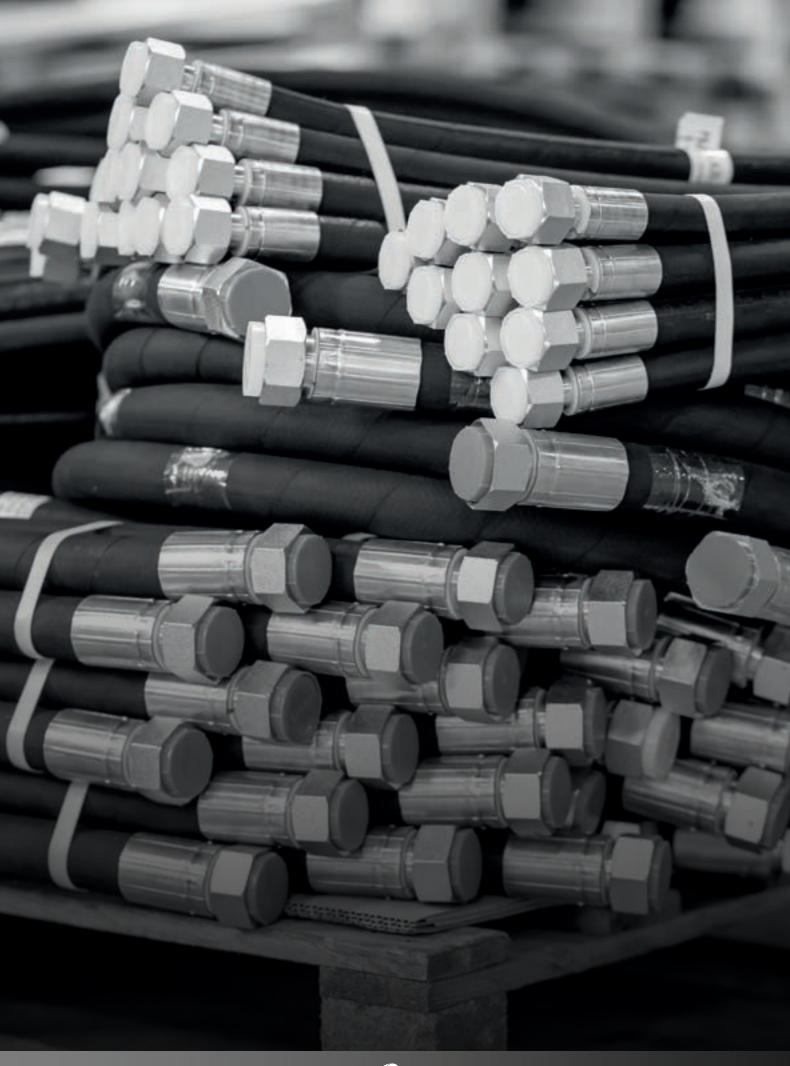
Measuring table (1,5 m segments) (part no 705605) Fume extractor (part no 720460)

Smooth blade (part no 706298)

**Motor Brake**Maintenance free electric motor brake enables fast stopping of blade rotation.

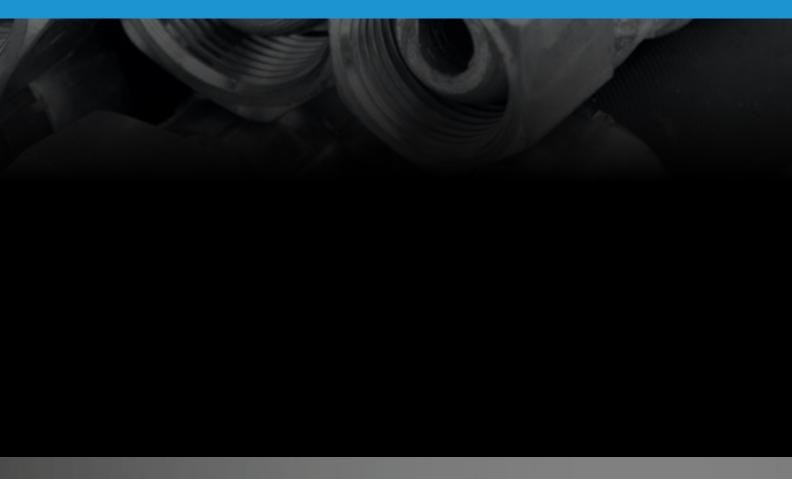


Touchscreen as standard feature





# SKIVING





### **FS50**

Finn-Power FS50 is a skiving machine that prepares hydraulic hoses for high demanding crimping. The machine is ergonomically designed for efficiency and ease of use. FS50 has adjustable tooling which saves in tool costs and maximizes productivity.

FS50 can do internal and external skiving.

TECHNICAL DATA	
Hose capasity, external (inch)	3/16-2
Hose capasity, internal (inch)	3/8-2
Speed of tool rotation (r./min)	100
Skiving length (mm)	100
Motor Power (kW/HP)	0.75 1) / 1.0
DIMENSIONS (LxWxH)	
mm	821x366x390
inch	32.3x14.4x15.4
WEIGHT	
kg/lbs	34/75

1) 3-phase



Pno	Size (inches)
715078	3/8
708937	1/2
707182	5/8
707167	3/4
707166	1
707179	1 1/4
707181	1 1/2
707184	2
711313	3/16
711312	1/4
711311	5/16
711310	3/8
711321	1/2
711320	5/8
711319	3/4
711318	1
711314	1 1/4
711315	1 1/2
711317	2
707253	
711331	
	715078 708937 707182 707167 707166 707179 707181 707184 711313 711312 711311 711310 711321 711320 711318 711318 711318 711314 711317 707253



## **EXPANSION**

Finn-Power has been focusing on bigger and tougher expansion needs. EF-series machines have been originally designed for tube and pipe industry but also used for expandable fittings.

### **EXPANSION COMPARISON**





TECHNICAL DATA	EF200	EF300		
Tube capasity, round (mm)	200	300		
Tube capasity, square (mm)	120x200	300x300		
Min. tube size (mm)	120	200		
Expanding length (mm)	85	200		
Max. wall thickness, basic steel (mm)	10	30		
Max. expanding die movement (mm)	15	15		
Expansion force (kN)	2100	22 000		
Cycle time 10 mm (s) 1)	7.9	12.4		
Motor Power (kW/HP)	6.5 / 8.8	15.0/20.1		
DIMENSIONS (LxWxH)	DIMENSIONS (LxWxH)			
Machine (mm)	775x1169x1455	1198x1877x1803		
Hydraulic Unit (mm)	713x705x1060	1197x957x1252		
Machine (inch)	30.5x46.0x57.9	47.2x73.9x70.9		
Hydraulic Unit (inch)	28.0x27.8x41.7	47.1x37.7x49.3		
WEIGHT (KG/LBS)				
Machine	875/1925	3500/7700		
Hydraulic Unit	182/400	350/770		

1) Theoretical with 10mm cycle





### **EF200**

Finn-Power EF200 expansion machine is a perfect solution for expanding different sized and shaped tubes and pipes. Die sets for this machine are specifically designed for different applications based on customer needs.

TECHNICAL DATA	
Tube capasity, round (mm)	200
Tube capasity, square (mm)	120x200
Min. tube size (mm)	120
Expanding length (mm)	85
Max. wall thickness, basic steel (mm)	10
Max. expanding die movement (mm)	15
Expansion force (kN)	2100
Cycle time 10 mm (s) 1)	7.9
Motor Power (kW/HP)	6.5 / 8.8
DIMENSIONS (LxWxH)	
Machine (mm)	775x1169x1455
Hydraulic Unit (mm)	713x705x1060
Machine (inch)	30.5x46.0x57.9
Hydraulic Unit (inch)	28.0x27.8x41.7
WEIGHT (KG/LBS)	
Machine	875/1925
Hydraulic Unit	182/400

1) Theoretical with 10mm cycle



ABSOLUTE QUALITY MADE IN FINLAND

#### **CONTROL**

ICC

#### STANDARD FEATURES

Auto greasing G3 Pressure expansion ICC1 Step expansion ICC2

#### **OPTIONS**

Foot pedal

Quality control ICC3

Graphical quality control ICC4

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Bar Code Reader BCR

Oil cooler \*\*

Oil Condition Monitoring OCM

Industry 4.0

\*\* Will have impact on motor size, hydraulic unit dimensions and weight.





FINN-POWER machines are easy to operate and maintain. You can choose from various options to increase the performance, quality control and integration into your existing production management systems.





### **EF300**

Finn-Power EF300 expansion machine is a perfect solution for expanding different sized and shaped tubes and pipes. Die sets for this machine are specifically designed for different applications based on customer needs.

TECHNICAL DATA	
Tube capasity, round (mm)	300
Tube capasity, square (mm)	300x300
Min. tube size (mm)	200
Expanding length (mm)	200
Max. wall thickness, basic steel (mm)	30
Max. expanding die movement (mm)	15
Expansion force (kN)	22 000
Cycle time 10 mm (s) 1)	12.4
Motor Power (kW/HP)	15.0/20.1
DIMENSIONS (LxWxH)	
Machine (mm)	1198x1877x1803
Hydraulic Unit (mm)	1197x957x1252
Machine (inch)	47.2x73.9x70.9
Hydraulic Unit (inch)	47.1x37.7x49.3
WEIGHT (KG/LBS)	
Machine	3500/7700
Hydraulic Unit	350/770

1) Theoretical with 10mm cycle



ABSOLUTF QUALITY MADE IN FINLAND

#### CONTROL

ICC

#### STANDARD FEATURES

Auto greasing G3 Pressure expansion ICC1 Step expansion ICC2

#### **OPTIONS**

Foot pedal

Quality control ICC3

Graphical quality control ICC4

Interface pack ETH (Communication TCP/IP & UDP)

A3 signal

Bar Code Reader BCR

Oil cooler \*\*

Oil Condition Monitoring OCM

\*\* Will have impact on motor size, hydraulic unit dimensions and weight.





FINN-POWER machines are easy to operate and maintain. You can choose from various options to increase the performance, quality control and integration into your existing production management systems.



## **INSERTING**

Finnpower inserting machines are designed to make fitting assembling quick and easy. With adjustable feeding angle finnpower machines offer optimal ergonomy and easy feeding for all size hoses.









### **IM2**

Air pressure operated IM2 is an ergonomic fitting pre-assembling machine for hoses up to 3". IM2 makes fitting assembling quick and easy.

Optional stand with adjustable feeding angle enables optimal ergonomy for different type of hoses.

TECHNICAL DATA	
Capacity (inches)	3
Max. Hose outer diameter (mm)	100
Max. Inserting force (kN)	6.2
Max. Clamping force (kN)	4.0
Max. Pressure (Bar)	8.00
DIMENSIONS (LxWxH)	
IM2 table-model (mm)	1017x733X649
IM2 with stand (mm)	1017x733x1280
WEIGHT (KG/LBS)	
IM2 table-model	105/231
IM2 with stand	140/308





# ABSOLUTE QUALITY AADE IN FINLAND

CTARI		DEC
$\sim 1 \Delta M$	DARD	RES

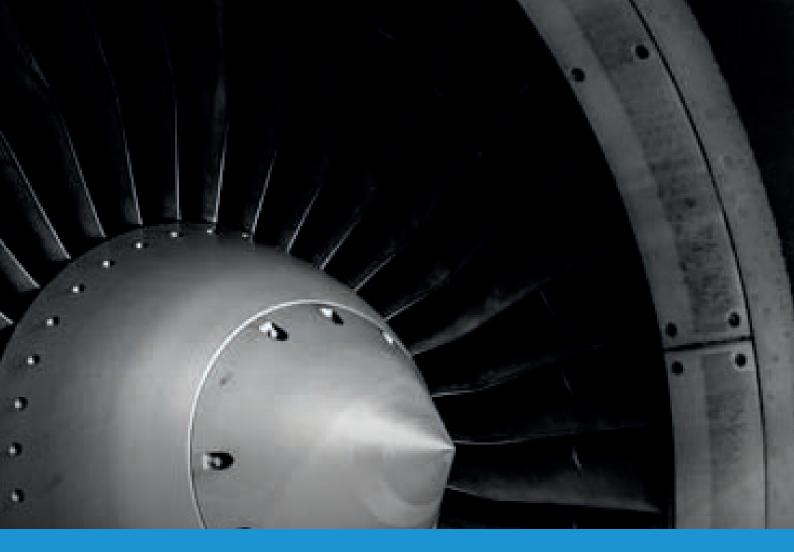
Pushing pressure adjustment
Clamping pressure adjustment
Adjustable centering position with scale
Adjustable hose feeding angle (requires stand)

#### **OPTIONS**

Stand (part no: Stand IM2)
Table tool set \* (part no: Table tools IM2)
Stand tool set \* (part no: Stand tools IM2)
\* Includes tool rack and all standard tools

#### TOOLS FOR IM2

ToolNo	Hose size (inches)	
715598	5/16	
715593	1/4	
715597	3/8	
715592	1/2	
715516	5/8	
715596	3/4	
715594	1	
715591	1 1/4	
715590	1 1/2	
715595	2	
718446	2 1/2	
718447	3	



## **TESTING**

Our mission is to help our customers to take a step forward in the field of pressure testing. With the innovative technology, such as the electric drive and SoftBleed, you can test quickly, economically and accurately. EasyLogging creates instant test certificate after each test.

## **TEST BENCHES COMPARISON**



TECHNICAL DATA		TB ECO 1300 & 2000		TB STD 1300 & 2300
Test connection		1 1/8"-12UNF HP (F)		1 1/8-12-UNF-HP (F)
Testroom		Stainless steel		Stainless steel
Pressure range (bar/psi)	TB-ECO 1300	105 – 1 300 / 1 523 – 18 854	TB-STD 1300	135 – 1 300 / 1 959 – 18 854
Pressure range (bar/psi)	TB-ECO 2000	155 – 1 925 / 2 249 – 27 919	TB-STD 2300	180 – 2 260 / 2 611 – 32 778
Flow (lpm/cuim @ 0 bar)	TB-ECO 1300	1.0 / 61.0	TB-STD 1300	1.4 / 85.0
Flow (lpm/cuim @ 0 bar)	TB-ECO 2000	0.6 / 36.0	TB-STD 2300	1.0 / 61.0
Test pressure gauge (bar/psi)	TB-ECO 1300	0 - 1 600 / 0 - 25 000	TB-STD 1300	0-1600/0-25000
Test pressure gauge (bar/psi)	TB-ECO 2000	0 - 2 500 / 0 - 36 250	TB-STD 2300	0 - 2 500 / 0 - 36 250
Test medium		Water from tap		Water from tap
Max hose length		Depends on bend radius		Depends on bend radius
Door operation		Manual with gas springs		Manual with gas springs
Door locking		Mechanical		Air driven
Incoming air pressure min.		7 bar to reach max test pressure		7 bar to reach max test pressure

TECHNICAL DATA		TB ADV 1300 & 2300		TB PRO 2000 & 4000
Test connection		1 1/8-12UNF-HP (F)		1 1/8-12UNF-HP (F)
Testroom		Stainless steel		Stainless steel
Pressure range (bar/psi)	TB-ADV 1300	135 – 1 300 / 1959 – 18 854	TB-PRO 2000	10 - 2 000 / 145 - 29 000
Pressure range (bar/psi)	TB-ADV 2300	180 – 2 260 / 2611 – 32 778	TB-PRO 4000	10 - 4 000 / 145 - 58 000
Flow (lpm/cuim @ 0 bar)	TB-ADV 1300	1.4 / 85.0	TB-PRO 2000	15.0 / 915.0
Flow (lpm/cuim @ 0 bar)	TB-ADV 2300	1.0 / 61.0	TB-PRO 4000	15.0 / 915.0
Test pressure display (bar/psi)	TB-ADV 1300	Digital	TB-PRO 2000	Digital
Test pressure display (bar/psi)	TB-ADV 2300	Digital	TB-PRO 4000	Digital
Test medium		Water from tap		Water from tap
Max hose length		Depends on bend radius		Depends on bend radius
Door operation		Manual with gas springs		Electrical with 2-hand operation
Lights		2 pcs LED lights		4 pcs LED lights
Door locking		Automatic		Automatic
Incoming air pressure min.		8 bar to reach max test pressure		7 bar to reach max test pressure

DIMENSIONS (LxWxH)	TB-ECO 1300 & 2000	TB STD 1300 & 2300	TB ADV 1300 & 2300	TB PRO 2000 & 4000
Test Area (mm)	1660x700x175 (front) 445 (back)	2500x890x270 (front) 510 (back)	2500x1300x270 (front) 510 (back)	2900x1300x950
Test Area (inches)	65.4x27.6x6.9 (front) 17.5 (back)	98.4x35.0x10.6 (front) 20.1 (back)	98.4x51.2x10.6(front) 20.1 (back)	114.2x51.2x37.4
External (mm)	2081x750x1408	3280x1000x1330	3280x1468x1330	3790x1417x2345
External (inches)	81.8x29.5x55.4	129.1x39.4x52.4	129.1x57.8x52.4	149.2x55.8x92.3
WEIGHT (KG/LBS)				
Approximately	250 / 551	870 / 1918	1100 / 2425	2500 / 5512



### TB-ECO 1300 & 2000

TB-ECO is an air-driven, manually operated workshop test bench with water as the test medium.

TB-ECO brings world class safety to the workshop test bench category with stainless steel testroom, 12 mm safety glass and Quick stop.

EasyLogging creates instant test certificate after each test.

TECHNICAL DATA		
Test connection		1 1/8"-12UNF HP (F)
Testroom		Stainless steel
Pressure range (bar/psi)	TB-ECO 1300	105 – 1 300 / 1 523 – 18 854
Pressure range (bar/psi)	TB-ECO 2000	155 – 1 925 / 2 249 – 27 919
Flow (lpm/cuim @ 0 bar)	TB-ECO 1300	1.0 / 61.0
Flow (lpm/cuim @ 0 bar)	TB-ECO 2000	0.6 / 36.0
Test pressure gauge (bar/psi)	TB-ECO 1300	0-1600 / 0-25000
Test pressure gauge (bar/psi)	TB-ECO 2000	0 - 2 500 / 0 - 36 250
Test medium		Water from tap
Max hose length		Depends on bend radius
Door operation		Manual with gas springs
Door locking		Mechanical
Incoming air pressure min.		7 bar to reach max test pressure
DIMENSIONS (LxWxH)		
Test Area (mm)	1660x700x175	(front) 445 (back)
Test Area (inches)	65.4x27.6x6.9 (	front) 17.5 (back)
External (mm)	2081x750x1408	3
External (inches)	81.8x29.5x55.4	
WEIGHT (KG/LBS)		
Approximately 250 / 551		



ABSOLUTE QUALITY ÓUR PASSION

Manual	
Air-driven	
STANDAF	RD FEATURES
	np with start/stop
Test fluid inlet	valve and Y-strainer
Quick stop (or	pens bleed valve and stops the pump)
Pressure regu	lator
Air and high p	ressure gauge
Bleed valve	
Isolate valve	
EasyLogging I	nstant Reporting*
Laptop holder	
	1 1/4"-12UNF-HP (M) to 1/2" BSP (F)
(TB361.000.13	33) ½" BSP (F) to ¾"-16UNF-HP (F)
	nction (End plug. Max 1000 bar)
Test adapter:	1 1/8"-12UNF-HP (F) to 3/4"-16UNF-HP (F) notion (End plug. Max 2000 bar)
with accuracy scale with calib	ssure sensor 0 – 1 500 bar of +/- 0,25% for full oration certificate. ncludes one year free software licence fee
OPTIONS	

Water filter (TB054.001) Extra gauge 0 – 250 bar (TB033.009)

QuickConnect 'Exchange' QCE 1000 (TB122.001)
QuickConnect 'Exchange' QCE 2000 (TB123.001)
Manifold set for 4 hoses, QCM 4x1/2" BSP (F) (TB148.001)

Eco reservoir (TB052.101)

Other language than standard (TB104.002)









### TB-STD 1300 & 2300

TB-STD is an air-driven, manually operated production test bench with water as the test medium. TB-STD brings world class safety to workshop test bench category with stainless steel testroom, double walls, 12 mm safety glass and Quick stop.

TB-STD offers a large test room with an adjustable turntable return test connection.

EasyLogging creates instant test certificate after each test.

TECHNICAL DATA		
TECHNICAL DATA		
Test connection		1 1/8-12-UNF-HP (F)
Testroom		Stainless steel
Pressure range (bar/psi)	TB-STD 1300	135 – 1 300 / 1 959 – 18 854
Pressure range (bar/psi)	TB-STD 2300	180 – 2 260 / 2 611 – 32 778
Flow (lpm/cuim @ 0 bar)	TB-STD 1300	1.4 / 85.0
Flow (lpm/cuim @ 0 bar)	TB-STD 2300	1.0 / 61.0
Test pressure gauge (bar/psi)	TB-STD 1300	0-1600 / 0-25000
Test pressure gauge (bar/psi)	TB-STD 2300	0 - 2 500 / 0 - 36 250
Test medium		Water from tap
Max hose length		Depends on bend radius
Door operation		Manual with gas springs
Door locking		Air driven
Incoming air pressure min.		7 bar to reach max test pressure
DIMENSIONS (LxWxH)		
Test Area (mm)	2500x890x270 (front) 510 (back)	
Test Area (inches)	98.4x35.0x10.6 (front) 20.1 (back)	
External (mm)	3280x1000x1330	
External (inches)	129.1x39.4x52.	4
WEIGHT (KG/LBS)		
Approximately 870 / 1918		



#### CONTROL

Manual Air-driven

STANDARD FEATURES

Air-driven pump with start/stop Test fluid inlet valve and inlet filter

Quick stop (opens bleed valve and stops the pump)

Pressure regulator

Air and high pressure gauge

Bleed valve Isolate valve

SoftBleed (de-energizer) Adjustable turntable return test connection

EasyLogging Instant Reporting\*

Laptop holder

Test adapter: 2 pcs. 1  $\frac{1}{8}$ "-12UNF-HP (M) to  $\frac{1}{2}$ " BSP (F) (TB361.000.133)

\* Including pressure sensor 0 – 1 500 bar with accuracy of +/- 0,25% for full scale with calibration certificate.

EasyLogging includes one year free software licence fee.

#### **OPTIONS**

Extra gauge 0 - 250 bar (TB033.009)

QuickConnect 'Exchange' QCE 1000 (TB122.001) QuickConnect 'Exchange' QCE 2000 (TB123.001)

Manifold set for 4 hoses, QCM 4x½" BSP (F) (TB148.001)

Fast filling (TB141.002)

Other language than standard (TB104.002)







ABSOLUTF QUALITY ÓUR PASSION

### **TB-ADV** 1300 & 2300

TB-ADV is an air-driven, automatically operated production test bench with water as the test medium.

Test bench comes with a 15-inch touch screen control. The fully automated test cycle includes prefilling, pressure build-up, holding, testing, Sofbleed, fast release and emptying the test object. TB-ADV has 2 test curves: ISO1402 and a burst test.

TB-ADV brings world class safety to the production test bench category with stainless steel testroom, double walls, 12 mm safety glass and Quick stop.

TB-ADV offers a large test room with an adjustable turntable return test connection. EasyLogging creates instant test certificate after each test.

	1 1/8-12UNF-HP (F)
	Stainless steel
TB-ADV 1300	135 – 1 300 / 1959 – 18 854
TB-ADV 2300	180 – 2 260 / 2611 – 32 778
TB-ADV 1300	1.4 / 85.0
TB-ADV 2300	1.0 / 61.0
TB-ADV 1300	Digital
TB-ADV 2300	Digital
	Water from tap
	Depends on bend radius
	Manual with gas springs
	2 pcs LED lights
	Automatic
	8 bar to reach max test pressure
2500x1300x270	(front) 510 (back)
98.4x51.2x10.6(front) 20.1 (back)	
3280x1468x1330	
129.1x57.8x52.4	1
	TB-ADV 2300 TB-ADV 1300 TB-ADV 1300 TB-ADV 2300 TB-ADV 2300 TB-ADV 2300 2500x1300x270 98.4x51.2x10.6( 3280x1468x133

#### CONTROL

Automatic

Air-driven

#### STANDARD FEATURES

Air-driven pump with start/stop

Test fluid inlet valve and inlet filter

Quick stop (opens bleed valve and stops the pump)

Proportional pressure regulator

High pressure sensor Bleed valve

Isolate valve

SoftBleed (de-energizer)

Adjustable turntable return test connection

EasyLogging Instant Reporting\*

Laptop holder

Test adapter: 2 pcs. 1 1/8"-12UNF-HP (M) to 1/2" BSP (F) (TB361.000.133)

\* Including pressure sensor 0 – 1 500 bar with accuracy of +/- 0,25% for full scale with calibration certificate.

EasyLogging includes one year free software licence fee

#### **OPTIONS**

Extra gauge 0 - 250 bar (TB033.009)

Fast filling (TB141.002)

QuickConnect 'Exchange' QCE 1000 (TB122.001) QuickConnect 'Exchange' QCE 2000 (TB123.001) Manifold set for 4 hoses, QCM 4x1/2" BSP (F) (TB148,001) Other language than standard (TB104.002)









### TB-PRO 2000 & 4000

TB-PRO is a unique Electric drive, fully automated, heavy-duty production/OEM testbench with the innovative **E-drive** technology for fast and economical test operations. Including test management software and bar code reader. The large test room makes it possible to load full pallets.

Test bench comes with a 15-inch touch screen control, enabling test job management and a fully automated test cycle including prefilling, pressure build-up, holding, testing, Softbleed, fast release and emptying the test object. TB-PRO has 2 test curves: ISO 1402 and a burst test.

TB-PRO brings world class safety to production test bench category with stainless steel testroom, double walls, 12mm safety glass and 2 Quick stops. Including extra test pressure sensor for max 400 bar. Test room has electrically operated doors and adjustable turntable return test connection.

EasyLogging creates instant test certificate after each test.

TECHNICAL DATA		
Test connection		1 1/8-12UNF-HP (F)
Testroom		Stainless steel
Pressure range (bar/psi)	TB-PRO 2000	10 - 2 000 / 145 - 29 000
Pressure range (bar/psi)	TB-PRO 4000	10 - 4 000 / 145 - 58 000
Flow (lpm/cuim @ 0 bar)	TB-PRO 2000	15.0 / 915.0
Flow (lpm/cuim @ 0 bar)	TB-PRO 4000	15.0 / 915.0
Test pressure display (bar/psi)	TB-PRO 2000	Digital
Test pressure display (bar/psi)	TB-PRO 4000	Digital
Test medium		Water from tap
Max hose length		Depends on bend radius
Door operation		Electrical with 2-hand operation
Lights		4 pcs LED lights
Door locking		Automatic
Incoming air pressure min.		7 bar to reach max test pressure
DIMENSIONS (LxWxH)		
Test Area (mm)	2900x1300x950	)
Test Area (inches) 114.2x51.2x37.		4
External (mm)	3790x1417x234	45
External (inches)	149.2x55.8x92.	3
WEIGHT (KG/LBS)		
Approximately 2500 / 5512		



#### CONTROL

Fully Automatic

Electrical driven

#### STANDARD FEATURES

Electrical driven Intensifier

Test fluid inlet valve and inlet filter

Quick stop (opens bleed valve and stops the pump)

Pressure regulator

High pressure sensor Bleed valve

Isolate valve

SoftBleed (de-energizer)

Return testline with moveable

and turnable right test connection Test medium inlet pressure sensor

Pressure itensifier

Main electrical switch

Extra test pressure sensor 400 bar

EasyLogging Instant Reporting\* Internal computer

ProSoftware

Test adapter: 2 pcs. 1 % "-12UNF-HP (M) to % " BSP (F) (TB361.000.133)

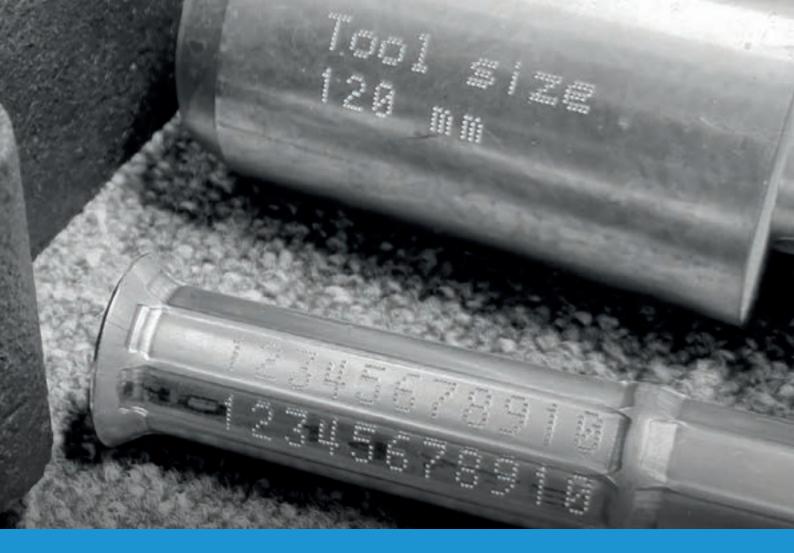
#### **OPTIONS**

QuickConnect 'Exchange' QCE 1000 (TB122.001) QuickConnect 'Exchange' QCE 2000 (TB123.001) Manifold set for 4 hoses, QCM 4x½" BSP (F) (TB148.001) Other manual language than standard (TB104.002)









### **MARKING**

Marking of Hydraulic Hose assemblies and other items is now faster and easier than ever before! Finn-Power marking machines provide perfect solution to mark product identification codes, serial numbers, inspection stamps, manufacturing data and other important information.









### MD2 - DOT PEEN MARKING

**OPTIONS** 

MD2 - Dot Peen marking machine offers method for economic and permanent marking for round items like tubes and hydraulic Hose Assemblies.

MD2 provides tamper-proof marking which is ideal for harshworking conditions such as mining, earth moving and agriculture.

MD2 can be operated independently or directly from crimping machine ICC-control.

TECHNICAL DATA	
Max item diameter (mm/inch)	180 / 7
Marking area (mm/inch)	50x90/1.97x3.54
Marking depth (steel) (mm/inch)	0.5/0.02
Marking speed (char/sec)	3
Connectivity	USB, Ethernet, ICC, BCR
Air pressure (bar/psi)	3-8 / 44-116
Materials	Metals, hard plastics, alloys, burnished metals, wood, paper, glass
Marking possibilities	Text, logos, pictures, lines, arcs, serial number generator, excell files, QR-codes, datamatrix, DXF-files
DIMENSIONS (LxWxH)	
824x744x1557 (mm)	32.5x29.3x61.3 (inch)
WEIGHT (KG/LBS)	
180/397	

Foot Pedal		
Bar Code Reader BCR		
MARKING SOLUTIONS FOR		
Product identification		
OEM spare part identification		
Product item codes and traceability		
Serial numbering with manufacturing date		
Quality assurance and inspection		







# OTHER MACHINE LAYOUTS

Finn-Power machines are available with different layout configurations to improve ergonomics, production speed or to integrate the machines better to automated production lines.







**Z-MODEL** 

Z-model is a configuration where crimping head and hydraulic unit are separated. Z-model provides freedom to place crimping head to optimal place based on different needs.

#### **AUTOMATIC LINES AND ROBOTIC CELLS WITH NEED FOR**

- Compact floor space requirement
- Flexible crimping head orientation
- Moving the crimping head

#### **ERGONOMIC WORK CELL DESIGN AND SAFETY**

- Optimizing table space and ergonomics
- Reducing work space noise level
- Hydraulic unit placement in separate room (e.g. pyrotechnic areas)

#### **SERVICE VAN USE**

- Optimizing weight balance by having hydraulic unit on the floor
- Maximizing table space

Z-MODEL AVAILABILITY		
SERVICE	P16HP, P16AP, P20CS, P32CS	
WORKSHOP	P20SCC, P32SCC, P51SCC, P60SCC	
PRODUCTION	All FP-machines	
NUT & CABLE	CC22, CC26, NC20, NC30, NC40, NC60	
SIDE FEED	SP100, SP350, SP1200, SP2000	
HEAVY DUTY	KC800, KC1200, KC2000	
EXPANDING	EF200, EF300	











# S-MODEL

S-models are designed for automated lines for faster crimping cycle time.

S-models require extra safety protection due to high closing speed defined by international regulations.

FP models are equipped with safety door and SP models with safety light curtain.

## S-MODEL AVAILABILITY

PRODUCTION FP20, FP120, FP140, FP145 SIDE FEED SP100, SP350, SP1200





HB/HS-MODEL

Horizontal Back (HB) and Horizontal Side (HS) -models offer different layout for standard machines. Different layouts provide optimal crimping head position for different applications.

HB-model is optimal for small but heavy products which can be fed below with hydraulic jack or from top with manipulator.

HS-model is ideal when crimping head position needs to be as low as possible. For example feeding long tubes and pipes via feeding rail.

## **HB/HS-MODEL AVAILABILITY**

PRODUCTION FP20, FP120, FP140, FP145, FP160, FP165, FP170, FP175





# **D-MODEL**

Finn-Power double head crimping machines allow crimping both ends of the product at the same time.

Basic configuration is one head stationary and second head moveable on rails.

Movement can be manual or electric and distance between heads as per customer request.

Each crimper is equipped with its' own ICC-control and machines can be operated individually or simultaneously with double hand operation.



## **DOUBLE HEAD MODELS AVAILABILITY**

**CRIMPING** SP350 & SP1200 Other D-models as per request

MINIMUM DISTANCE BETWEEN HEADS, CENTER TO CENTER (MM/INCH)

SP350D 138 / 5.43 SP1200D 328 / 12.91





# **MACHINE OPTIONS**

Finn-Power offers wide selection of options for machines to make crimping/expanding easier, faster and safer. In-built automatic quality control option increases your product quality and customer satisfaction. Tailor your machine to meet your needs!



# **AUTO GREASING**

Greasing is a fundamental function for any mechanical structure with high forces, stress or load.

Because of greasing Finn-Power machines have the best accuracy, repeatability and lifetime in the world.

Automatic greasing saves time and ensures constant work flow without interruptions. Automatic greasing extends the service interval. For automated lines auto greasing is a must.

Greasing reduces friction and ensures that maximum capacity is always in use. Greasing interval is adjustable.

## Requirements:

• Air pressure

#### Notes:

- Always use genuine Finn-Power grease
- Grease for food related industries also available

AVAILABILITY			
PRODUCTION	FP20, FP120, FP140, FP145, FP160, FP165, FP170, FP175, EF200, EF300		
HEAVY DUTY	KC800, KC1200, KC2000		
SIDE FEED	SP100, SP350, SP1200		
NUT & CABLE	NC20, NC30, NC40, NC60, CC22, CC26		





# **BACKSTOP**



Backstops are used for easy positioning of the part and ensuring every single piece is crimped the same way. Backstop speeds up the crimping process.



## **ELECTRICAL BACKSTOP**

Electrical backstop comes as a standard for all FP- and CC-series machines (except FP170/175). Electrical backstop starts the crimping cycle by pressing a part against the backstop and enables holding the part with both hands.



## **MECHANICAL BACKSTOP**

Mechanical backstop comes as a standard for all NC-series machines. It helps positioning the part for crimping. With mechanical backstop you need to activate the crimping cycle by pressing the buttons or using the foot pedal.





Bar Code Reader (BCR) is designed to speed-up ICC usage. BCR is connected to ICC with USB. As default BCR supports Code-39 full ASCII and Data Matrix formats.

Other formats available on request. BCR reads the barcode index and activates wanted function.





Data Matrix

Code-39 Full ASCII

Different ways to use barcode reader:

- User login
- Job queue (activates job from job queue)
- · Automatic job (activates wanted recipe)







# **CAMERA**

Camera provides better visibility to the backside of the machine. It helps positioning of the part but also provides extra safety. 7" screen can be positioned conveniently according to operator's needs. Magnetic mounting found on both camera and display.

High quality camera specially for industrial use. Real time picture without delay. Good contrast on picture on low light conditions.

Camera with display -option is available for FP and KC-series, as factory installation.



# CONNECTIVITY

ICC connectivity package helps to connect and communicate with all other systems in your factory.

Electronic recipe management enables creating and maintaining recipes remotely. ICC provides online job queue management as well as tracking of work progress.



## TCP/IP

- · Connection oriented protocol, checks and resends messages if needed.
- · Connections to ERP, MES, robotic systems, other external control or reporting systems.
- Can be connected, for example, with Siemens, Beckhoff, Allen Bradley, Omron, Schneider Electric, and other brand PLCs.
- ICC acts as TCP client and connects to PC/ PLC server
- Control recipes, work queue, manage work orders and user accounts, demonstrate and activate jobs for the machine, read machine status and quality control reports.

## **UDP/IP**

- Connectionless protocol. Sends the information without checking whether or not anyone receives it.
- The user can collect data from all machines at the factory and get charts of utilization rates, production volumes, efficiency, etc. Tracks and alerts can be made for long waiting times or pressure limits.

## **FTP**

- · Client-server protocol that relies on two communications channels between client and server.
- · Using FTP, a client can upload, download, delete, rename, move and copy files on a server.
- · Copying files and managing recipes is easy.

## **A3 SIGNAL**

- · Optional cable connection
- Enables outside control to activate crimping cycle and receive info when crimping diameter have been reached
- Automated lines
- Enables sending ICC counter, greaser and ICC3/4 alarms to outside control and resetting them remotely.



# **INTEGRATIONS TO IT-SYSTEMS**







# **FOOT PEDALS**

Standard foot pedal (single pedal) is available for all machines except P20NMS, P32NMS, P51MS, P60MS and service line machines.

Standard feature for FP160/165, FP170/175, KC800, KC1200, KC2000, SP100, SP350, SP1200, SP2000 and NC machines.

Electrical backstop and foot pedal share the same J2 connector. They cannot be used simultaneously. On ICC controlled machines AUX-mode is used for foot pedal and electrical backstop operation.

## SINGLE FOOT PEDAL CAN BE INSTALLED AS AN OPTION FOR

FP20 / FP120 / FP140 / FP145

CC22 / CC26

P20SCC / P32SCC

P51SCC / P60SCC / P70SCC

## DOUBLE FOOT PEDAL CAN BE INSTALLED AS AN OPTION FOR

P20NMS / P32NMS

P51MS / P60MS



In P20NMS, P32NMS, P51MS and P60MS machines foot pedal is **double pedal**. One pedal is for crimping and the other one for opening. When foot pedal is connected, dies will move as long as the foot pedal is pressed or till the set crimping diameter has been reached. Crimping can be interrupted by lifting the foot from the pedal. After reaching the crimping diameter dies are opened by using the other pedal.



Single foot pedal part number: 691563



Double foot pedal part numbers: 676906 for P20NMS, P32NMS, P51MS and P60MS







# **GREASE**

Greasing is a fundamental function for any mechanical structure with high forces, stress or load.

Finn-Power Grease has been developed especially for crimping machines and it has very high resistance to extreme forces and temperatures.

Because of greasing Finn-Power machines have the best accuracy, repeatability and lifetime in the world.

Greasing reduces friction and ensures that maximum capacity is always in use.

#### Notes:

- Always use genuine Finn-Power grease
- Grease for food related industries also available

## Order numbers:

- 019302 .....400 g tube
- 019302/12.....12 x 400 g tube in a box
- 019302/18kg .... 18 kg bucket



## ICC1 PRESSURE CRIMPING

ICC1 pressure crimping option enables controlling the crimping based on pressure instead of dimension.

Pressure crimping is crucial option when crimping high sensitivity products such as fiber glass rods or light and thin ferrules. Components with variable dimensions such as wires, cables and casted parts are typically crimped with pressure crimping option to required tightness.



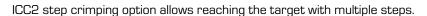








# ICC2 STEP CRIMPING



It is widely used for complex automotive hoses ensuring every fitting in the assembly will be crimped. It also allows different parameters for each step.

Other suitable applications for step crimping are:

- Products with big dimensional reduction (start vs end dimension)
- Materials with tendency to collapse or to flow between die sets
- Products with high spring back
- Need for extra smooth crimping surface













# ICC3 **QUALITY CONTROL**

ICC3 is automatic quality control method with alarm function. ICC3 measures the end diameter and end pressure which need to be within defined values.

ICC3 removes the need for the manual measurement of the product and records all the crimping parameters and data.

#### Different count modes:

- · Pressure or diameter
- · Pressure and diameter
- · Pressure only
- · Diameter only

ICC3 increases the production efficiency and prevents faulty parts ending up to final customers.

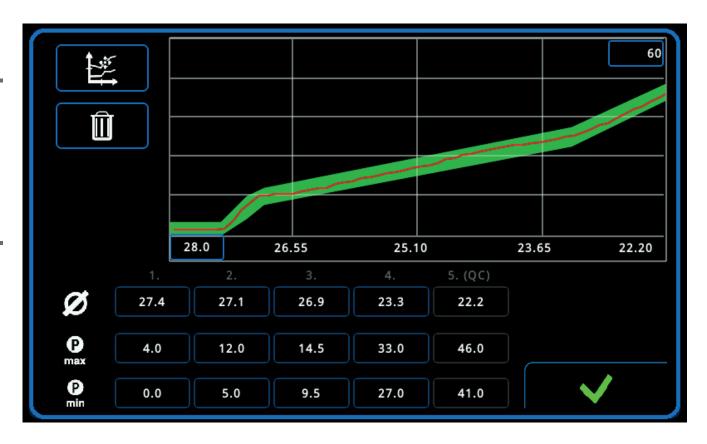
## Different alarm modes:

- Counter value not changed
- Sound
- Die set lock
- Machine lock (operator can not remove the part)









# ICC4

## **GRAPHICAL QUALITY CONTROL**

ICC4 is patented integrated online graphical quality control. ICC4 measures crimping from start to end and can detect problems during the whole crimping process. ICC4 stops the process at any point when problem occures. ICC4 saves automatic quality reports with crimping parameters and crimping data.

ICC4 increases the production efficiency and prevents faulty parts ending up to final customers. ICC4 also reduces the need for additional testing.

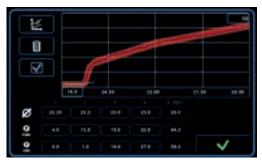
## Different count modes:

- · Pressure or diameter
- Pressure and diameter
- · Pressure only
- · Diameter only

### Different alarm modes:

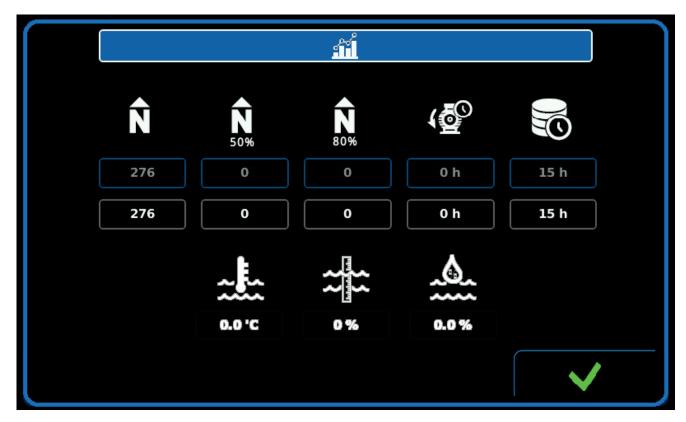
- · Counter value not changed
- Sound
- Die set lock
- Machine lock (operator can not remove the part)











## OIL COOLER

Finn-Power oil cooler has been designed for high temperature working environments and for high volume non-stop production.

Oil cooler keeps the oil temperature optimal even in harsh conditions.

Available for all FP-, NC- and CC-series machines and for SP2000.

Note: Oli cooler has impact on hydraulic unit size.



# **OIL CONDITION MONITOR**

Finn-Power Oil Condition Monitor (OCM) is developed for monitoring oil condition.

OCM measures oil temperature, level and water %. It also measures the cleanlines of the oil and detecs possible filter blocking.

Available for all machines with ICC-control (CC-machines Z-models only).

Note: OCM is typical requirement for Industry 4.0.



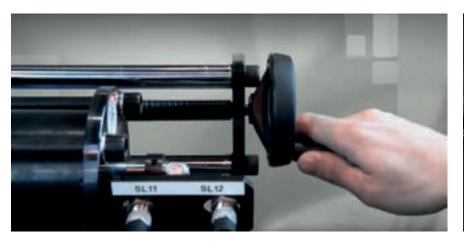
# **PINNING SUPPORT MANDREL**

Pinning support mandrel is designed to support component inner shape and diameter.

The mandrel will be automatically pulled out after the crimping. It will also ensure correct positioning for the component. Stroke range can be adjusted by a sensor ring.



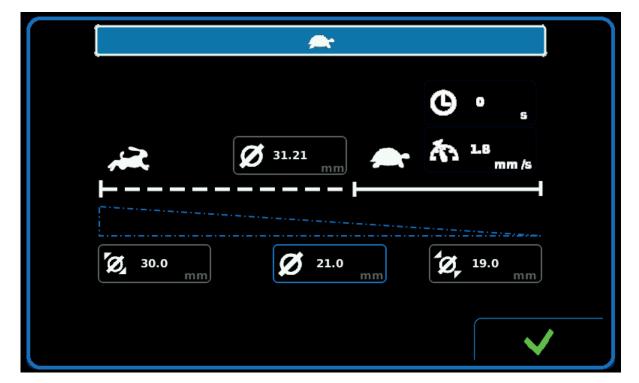
FP20 / FP120 / FP120SCC / FP140 / FP145 / FP160 / FP165 / FP170 / FP175











## SPEED ADJUSTMENT

The speed adjustment option is designed for sensitive materials or components requiring slower deformation speed than standard.

The crimping speed can be adjusted to give time for material to flow and deform in demanding fittings and other sensitive crimps and materials. The speed can be adjusted steplessly as slow as 0,1 mm/s, but machine can also be operated with normal speed.

The speed adjustment option is available for all Finn-Power FP- and KC-series machines.

In addition to speed adjustment option there is a standard ICC feature which enables adjustment of time when changing from closing speed to crimping speed.

# APPLICATIONS WHERE SLOWER CRIMPING SPEED IS NEEDED TO ENSURE PROPER MATERIAL DEFORMATION: Ultra-high pressure hoses Titanium fittings Electrical insulators Other sensitive materials









Tool base and die set rack are designed for P-series machines for storing the tools.

Tool base is a table capable of holding the machine and die set rack is a stand alone rack for tools only.

Tool base and die set rack comes always with Quick Change Tool.





PRODUCT	PRODUCT NUMBER	CAPACITY (Slots)	DIMENSIONS (LxWxH)	WEIGHT (KG/LBS)
P20 rack	415663	12	556x400x480 mm / 21.9x15.7x18.9 inch	25/55
P20 table	710578	20	650x600x740 mm / 25.6x23.6x29.1 inch	45/99
P20X table	424474	12	593x600x730 mm / 23.3x23.6x28.7 inch	38/84
P32/P51-70 rack	692740	16	606x400x696 mm / 23.9x15.7x27.4 inch	25/55
P32 table	710579	20	650x600x740 mm / 25.6x23.6x29.1 inch	45/99
P32X table	702641	16	675x600x740 mm / 26.6x23.6x29.1 inch	40/88
P51-70 table	720198	18	844x650x550 mm / 33.2x25.6x21.7 inch	63/139







## **SMART DIE RACK**

Smart Die Rack is designed to remove human errors in die set change process.

Smart Die Rack locks all the die sets and allows user to pick up only the correct die set required by ICC control.

Correct die set and empty die set holder are indicated with light to ease up the process.

Combine Smart Die Rack with other advanced ICC quality options and your production is one step closer to become bullet proof.

Smart Die Rack is design for 32-series and 20-series die sets only and it requires ICC control.

Factory installation only.

## SMART DIE RACK (8 DIE SETS) FOR 20 SERIES DIES

**PRODUCTION** FP20 (stand model die rack)

#### SMART DIE RACK (8 DIE SETS) FOR 32 SERIES DIES

PRODUCTION FP120, FP140, FP145 (integrated die rack)

## SMART DIE RACK (16 DIE SETS) FOR 32 SERIES DIES

**PRODUCTION** FP120, FP140, FP145, FP160, FP165, FP 170, FP175 (stand model die rack)





# **DIE SETS**

Finn-Power is capable producing all kind of die sets for your needs. Additive manufacturing (3D metal printing) gives us possibility to manufacture shapes where only the sky is the limit.





# **DIE SETS**

MADE IN FINLAND

#### **DIE SET 16-SERIES** DieSetNo Crimp. range (mm) 10.0-12.0 18212/10 10 55 18212/12 55 12.0-14.0 12 14.0-16.0 18212/14 14 55 18212/16 16 55 16.0-19.0 18212/19 19 55 19.0-23.0 18212/23 23 55 23.0-27.0 18212/27 27 65 27.0-31.0

65

31.0-38.0

18212/31

31

DIE SET 20-SERIES				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18013/10	10	55	10.0-12.0	
18013/12	12	55	12.0-14.0	
18013/14	14	55	14.0-16.0	
18013/16	16	55	16.0-19.0	
18013/19	19	55	19.0-23.0	
18013/23	23	55	23.0-27.0	
18013/27	27	70	27.0-31.0	
18013/31	31	70	31.0-36.0	
18013/36	36	75	36.0-41.0	
18013/41	41	75	41.0-47.0	
18013/47	47	85	47.0-54.0	
18013/54	54	85	54.0-61.0	

DIE SET NC20-SERIES				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18546/12	12	3	12.0-16.0	
18546/16	16	4	16.0-22.0	
18546/22	22	4.5	22.0-27.0	
18546/27	27	5	27.0-34.0	
18546/34	34	5	34.0-41.0	
18546/41	41	5	41.0-49.0	

DIE SET CC22				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18315/10	10	50	10.0-12.0	
18315/12	12	50	12.0-14.0	
18315/14	14	50	14.0-16.0	
18315/16	16	50	16.0-19.0	
18315/19	19	50	19.0-23.0	
18315/23	23	50	23.0-27.0	
18315/27	27	50	27.0-31.0	
18315/31	31	50	31.0-36.0	
18315/36	36	50	36.0-41.0	
18315/41	41	50	41.0-47.0	
18315/47	47	50	47.0-54.0	

DIE SET NC30-SERIES						
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)			
702044/12	12	3	12.0-14.0			
702044/14	14	3	14.0-16.0			
702044/16	16	4	16.0-19.0			
702044/19	19	4	19.0-22.0			
702044/22	22	4.5	22.0-26.0			
702044/26	26	4.5	26.0-30.0			
702044/30	30	5	30.0-34.0			
702044/34	34	5	34.0-39.0			
702044/39	39	5	39.0-45.0			
702044/45	45	5	45.0-51.0			
702044/51	51	5	51.0-57.0			
702044/57	57	5	57.0-63.0			

DIE SET 32-SERIES						
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)			
18506/10	10	55	10.0-12.0			
18506/12	12	55	12.0-14.0			
18506/14	14	55	14.0-16.0			
18506/16	16	55	16.0-19.0			
18506/19	19	55	19.0-22.0			
18506/22	22	70	22.0-26.0			
18506/26	26	70	26.0-30.0			
18506/30	30	70	30.0-34.0			
18506/34	34	75	34.0-39.0			
18506/39	39	75	39.0-45.0			
18506/45	45	90	45.0-51.0			
18506/51	51	90	51.0-57.0			
18506/57	57	100	57.0-63.0			
18506/63	63	110	63.0-69.0			
18506/69	69	110	69.0-75.0			
18506/74	74	110	74.0-80.0			
18506/78	78	110	78.0-87.0			

DIE SET 32-SERIES (for 145)				
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)	
18506/63/120	63	120	63.0-69.0	
18506/69/120	69	120	69.0-75.0	
18506/74/120	74	120	74.0-80.0	
18506/78/120	78	120	78.0-87.0	

DIE SET NC40-SERIES					
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)		
703955/63	63	5	63.0-69.0		
703955/69	69	5	69.2-73.0		
703955/73	73	6	73.0-81.0		
703955/81	81	7	81.0-93.0		
703955/93	93	7	93.0-105.0		
DIE SET NC60-SERIES					

DIE GET 14000 GET IIEG					
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)		
715345/100	100	8	100.0-108.0		
715345/108	108	8	108.0-116.0		
715345/116	116	9	116.0-126.0		
715345/126	126	9	126.0-136.0		
715345/136	136	10	136.0-146.0		
715345/146	146	10	146.0-156.0		

DIE SET SP100-SERIES					
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)		
701817/10	10	40	10.0-12.0		
701817/12	12	40	12.0-14.0		
701817/14	14	40	14.0-16.0		
701817/16	16	40	16.0-19.0		
701817/19	19	40	19.0-23.0		
701817/23	23	40	23.0-27.0		
701817/27	27	40	27.0-31.0		
701817/31	31	40	31.0-36.0		
701817/36	36	40	36.0-41.0		
701817/41	41	40	41.0-47.0		
701817/47	47	40	47.0-54.0		

DIE SET 140-SERIES					
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)		
18860/84	84	110	84.0-92.0		
18860/92	92	110	92.0-100.0		
18860/100	100	110	100.0-108.0		
18860/108	108	110	108.0-116.0		
18860/116	116	110	116.0-124.0		
DIE SET 145-SERIES					
DieSetNo	D (mr	) L(mm)	Crimp. range (mm		
18860/84/120	) 84	120	84 0-92 0		

120

120

92.0-100.0

100.0-108.0

108.0-116.0

116.0-124.0

92

108

18860/92/120

18860/100/120

18860/108/120

18860/116/120

DIE SET 160-SERIES							
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)				
18852/84	84	116	84.0-92.0				
18852/92	92	116	92.0-100.0				
18852/100	100	116	100.0-108.0				
18852/108	108	116	108.0-116.0				
18852/116	116	116	116.0-126.0				
18852/126	126	116	126.0-136.0				
18852/136	136	116	136.0-146.0				
18852/146	146	116	146.0-156.0				
18852/156	156	116	156.0-166.0				
18852/166	166	116	166.0-178.0				
18852/178	178	116	178.0-190.0				
18852/190	190	116	190.0-202.0				

DIE SET 170-SERIES						
DieSetNo	D (mm)	L (mm)	Crimp. range (mm)			
405060/205	205	220	205.0-220.0			
405060/220	220	220	220.0-235.0			
405060/235	235	220	235.0-250.0			
405060/250	250	220	250.0-270.0			
405060/270	270	220	270.0-290.0			
405060/290	290	220	290.0-320.0			

In addition to the standard die sets, a wide range of special die sets is available on request.







# SPECIAL DIES

## **GENERAL CRIMPING APPLICATIONS**

As an addition to standard dies Lillbacka Finn-Power has special dies in stock for most common crimping applications. Including:

#### Different dimensions

- Small and big diameters
- Extra short and long die sets
- · Customized shapes

## Dies for applications

- Air Conditioning (AC)
- · Hydraulic hose fittings
- Brake hoses
- Cable crimps
- · Pipe crimps

## **SPECIAL CRIMPING APPLICATIONS**

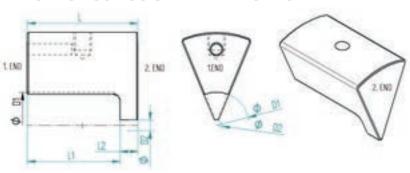
We also manufacture customer specific tooling to fit the individual needs of your application. Everything from modifying already working tool designs to creating totally new solutions for even the most demanding crimping challenges.

We provide customized dies machined and with industrial metal additive manufacturing (3D-printing).

#### We can manufacture dies

- · Without geometrical manufacturing limits
- For the toughest use-cases
- · With fast development, test and delivery cycles

## **ASK FOR OUR QUICK DELIVERY OPTION!**









# **MARKING DIES**

Marking Dies are the most cost efficient and fastest marking method for seldomly changing part identification.

Marking is done during the crimping process without additional steps.

Marking dies are available with fixed text/logo or with changeable marking inserts.

Fixed text/logo are available for all die sets and changeable marking inserts available as a standard for 20- and 32-series die sets.

DIE SET 20-SERIES						
DieSetNo	D (mm)	L (mm)	Max no of stamps per segments	Character height (mm)		
18247/14/S	14	55	13	2		
18247/16/S	16	55	13	2		
18247/19/S	19	55	16	3		
18247/23/S	23	55	16	3		
18247/27/S	27	70	16	3		
18247/31/S	31	70	16	3		
18247/36/S	36	75	10	3		
18247/41/S	41	75	10	3		
18247/47/S	47	85	12	3		
18247/54/S	57	85	12	3		
18247/16L/S	16	75	13	3		
18247/19L/S	19	75	16	3		
18247/23L/S	23	75	16	3		
18247/27L/S	27	75	16	3		
18247/31L/S	31	75	16	3		

DIE SET 32-	SERIES			
DieSetNo	D (mm)	L (mm)	Max no of stamps per segments	Character height (mm)
18786/14/S	14	55	13	2
18786/16/S	16	55	13	2
18786/19/S	19	55	16	3
18786/22/S	22	70	16	3
18786/26/S	26	70	16	3
18786/30/S	30	70	16	3
18786/34/S	34	75	16	3
18786/39/S	39	75	16	3
18786/45/S	45	90	16	3
18786/51/S	51	90	16	3
18786/57/S	57	100	14	3
18786/63/S	63	110	14	3
18786/69/S	69	110	14	3
18786/74/S	74	110	14	3
18786/78/S	78	110	14	3



## SALES CONTACT INFORMATION



VESA HIETALAHTI vesa.hietalahti@lillbacka.com +358 40 586 3999

Sales & Marketing Director



MIKKO KONTIAINEN mikko.kontiainen@lillbacka.com +358 50 571 1896

Europe, Asia-Pacific & Africa



ROBERT PARSONS robert.parsons@lillbackausa.com +1 407 446 7310

North America & Mexico



PER BROMAN per.broman@lillbacka.com +358 40 480 1483

Europe, Middle East, Central Asia & Scandinavia



JARI KUIVANTO jari.kuivanto@lillbacka.com +358 50 566 0937

Finland & Applications



JORMA KIVIKANGAS jorma.kivikangas@lillbacka.com +358 50 383 6644

Spare parts & Service



PETRI HANHIMÄKI petri.hanhimaki@lillbacka.com +358 40 570 8689

Special dies & Tooling



**URSULA KOIVISTO** ursula.koivisto@lillbacka.com +358 50 383 6700

Sales Coordinator



TANJA SUVISALMI tanja.suvisalmi@lillbacka.com +358 50 557 0787

Sales Coordinator



## Lillbacka Powerco Oy

P.O.Box 1, Fl-62301 Härmä, Finland www.finnpower.fi phone: +358 10 347 7400 powerco@lillbacka.com

## Lillbacka USA

1629 Prime Court, Suite 400, Orlando, FL 32809 USA www.lillbackausa.com phone: +1 847 301 1300 fax: +1 847 301 2562

